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Screening Domesticity

Sebastian Ignacio Aedo Jury
PhD Architecture by Design, University of Edinburgh
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I declare that the work presented in this thesis has been composed solely by me and is entirely my own work, and that no part of this thesis has been submitted for another degree or professional qualification.

Abstract

Screening Domesticity explores the mediatisation of domestic space over the past century through four exploratory case studies – the *Villa Müller* (Adolf Loos, 1930), the *Maison de Verre* (Pierre Chareau, 1932), *Case Study N°8* (Charles and Ray Eames, 1949), and the *Nautilus* project (Arturo Torres, Jorge Christie, 2000). Screens are technical apparatuses as well as *dispositifs*; meaning that they are not just pieces of material technology, but complex objects embedded in discourses and social practices. The increased use and prevalence of them in our environment and their ever-increasing penetration of the domestic realm has changed our conception of privacy and domesticity and the way media forms are themselves understood. As media has been domesticated, the domestic space has been mediatised.

The appearance at the beginning of the nineteenth century of new media of mass communication and technologies of reproduction not only transformed what had previously been stable boundaries but also the very definition of the subject as self- reflective and centred being. Media technology has opened-up new understandings of human cognition and perception. Among its consequences has been the view of the unconscious as a system of inscription and information processing and of psychoanalysis as a science for decoding it. Working with elements of media archaeology and psychoanalytic theory, the first part of the thesis focuses on the consequences of photography and film informing the domestic space of Adolf Loos' *Villa Müller* and Pierre Chareau's *Maison de Verre*. Through an optical survey of its interiors, the design component of the research analyses the optical hierarchies inscribed within the house and the changing conditions of subjectivity triggered by new optical relations.

As an exemplary model of post war-domesticity, Charles and Ray Eames *Case Study N°8* is explored through the lens of their film *House: After Five Years of Living* (1955). The concept of screening is animated by an important ambiguity – on one hand, it conceals and hides, and on the other it shows, makes present. Working as a kind of ideological *dispositif*, the Eameses' film is able to project a new domesticity while simultaneously obscuring the anxieties immanent to that domesticity's Cold War context. Issues of surveillance, domestic superabundance, material technology and material knowledge that constantly inform the work of Charles and Ray Eames are explored and unpacked in the context of an acceleration of informational media that is interconnected with the escalation of military technology.

The *Nautilus* project is a recent art installation consisting of a transparent glass house placed in the city centre of downtown Santiago, Chile. *Nautilus* became for two weeks the house of an actress who performed domestic routines in front of hundreds of passers-by and the media. This last case study is explored in relation to the rise of reality television shows and the presentation of the self via distributed digital platforms. The project opens up a series of questions regarding contemporary forms of exhibitionism and voyeurism activated by intensifying socio-technological mediation and the emergence of domestic space as itself an instrumental medium through which to discharge our mediatised subjectivities.

Through drawings, physical models and installations, *Screening Domesticity,* discerns the *screen* practices that operate in the organisation of these different interiors, which are accessible through their particular mode of media dissemination. Therefore, in this study, the topos of the *screen* is never fixed, but rather wanders through multiple places and representation systems. We can find this in the technological media apparatuses, as an architectural element, as the mechanism of subjective formation, and also in the same design process. From this perspective, the *screen* is conceived as a practice, not simply as a material piece of technology. Therefore, the name of the thesis, "Screening Domesticity", does not just reveal but also displays and exhibits what is discovered. This information is produced and conveyed primarily by the different drawings found throughout this work. Thus, design-research is constantly guided by the drawings through a mapping process, wherein the different media representations (photography, film or television images) fold back into architecture — following the conventions of architectural representation. Throughout a process of continual permutation, the drawings (the practice of mapping) transform the media conditions of the interior into alternative forms of material manifestation, proposing new modes of subjectification.

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Contents

I

1. Introduction: Screening Domesticity

I

Domesticity is not simply the definition of an interior space, but a practice of making one. The term emerged as a reaction to the incipient commodification of the outside world, namely the metropolis, and developed under its *screenness* condition. In its original form, domesticity can be regarded as a series of practices such as: the provision of care, family values, food and shelter, which are assembled under a mechanism of inhabitation — the domestic interior. This one, is a system that resists time, where outside its walls, a persistence objectification of the world is produced by the exchange value of every aspect of life. In this sense, the domestic interior, as the space where domesticity is produced, is a screen, screening out the rationalisation of life from certain inhabitation practices, which seek to secure an uncertain subjectivity which has long since disappeared[1].

The domestic interior operates as a material screen, shielding the interior from the outside, however, the influence of new media practices at the beginning of the twentieth century effectively began to erode the impenetrability of its walls. Domesticity began to be consumed in publications and exhibitions through photography, film and television. The interior is commodified and screened back to the city from which it had initially been protected. The domestic interior is a space that has simultaneously absorbed and altered media practices and representations. It begins to be produced and consumed as a space that fills various material, social, and technological expectations. It is difficult to think about domestic space outside its *screenness* condition.

The topic of this thesis is the performance of domestic space as a screen. While most scholarly discussion has focused on the penetration of the media into the house, and the new consumption routines as inhabitation practices, I focus on the subjective and material consequences in the representation of the space by different screening practices and techniques.

This means that I discern, in a series of four exemplary case studies, the *screen* practices that operate in the organisation of their interiors, which are accessible only through their particular mode of media dissemination. Therefore, I recognised film practices through the photographic representations of the interior, or certain cinematic disposition through televised images. This implies that, as an image, the domestic interior is able to enclose one medium within another. In that context I employ some media archaeological literature to identify the media practices operating in the design

1 I am referring here to Walter Benjamin's two concepts of experience: *Erlebni* and *Erfahrung*. Benjamin considers that *Erfahrung* refers to an unconscious as much as a collective experience which is strongly associated with a sense of tradition. This concept denotes the assimilations produced by the subject when encountering situations and events in society generally. *Erlebnis*, on the other hand, refers to fleeting and disconnected experiences not integrated to the long sense of the experience of *Erfahrung*. See Walter Benjamin, "On Some Motifs in Baudelaire," in *Illuminations*, ed. Walter Benjamin and Hannah Arendt (London: Fontana Press, 1992).

and the spatial articulation of the domestic interior. Although the four houses studied in this thesis are linked to specific moments in the media history, and therefore to particular modes of viewing, representation and dissemination, media archaeology dissolves the classification of media — it recuperates media inside one another as if wrapped technologies.

II

From another perspective, the experience of space is not limited to its inhabitation, nor to its image, but expands towards the viewing conditions proposed by the media. Therefore, my approach to the *screenness* of domesticity focuses on a viewing condition as a subjectification process. The viewer gains access to the interior experience of inhabitation only through a hyper-mediated and ideological representation of it; therefore, he or she is 'subjectified'. The surface of representation (the screen of photography, film or television) works as a mirror, paralleling the hidden processes underpinning the production of the image, and the unconscious operation of the psyche which regulates the conscious experience of them. In this investigation, I rely on psychoanalytic theory to explore the tensions and intricacies which have arisen between the media representations of the space and the shifting conditions of the subjectivities determined by it. Therefore, in this study, domesticity is located at crossroads between media and visuality.

Psychoanalysis is exactly where I find a productive methodology to thoroughly examine the intersection between domesticity, visuality and media. By applying the concepts of the *screen* and the *gaze* developed by Jacques Lacan, I discern and also bridge the crucial boundary between experience and representation. Moreover, in developing his theory of the scopic drive, which addresses the visible world, Lacan conceived vision not as a concern with real space but rather an imaginary space which he called the space of topology. Vision is not only what the conscious eye sees in space, but also a dialogue that sutures it with the unconscious (the gaze), as if an inscription surface that remains concealed and repressed, thereby assigning meaning to our visual experience. This situation is manifested in the multiples visual analyses developed by Lacan, which consistently tried to undermine the perspectival space of painting — as if 'excavating' the surface of representation — to find element of the scopic drive operating in it. Thus, some of Lacan's discussions on anamorphism, anxiety, or the insistence of the signifier (what he called repetition compulsion), describes a kind of mapping where the subject is finally rendered in the object of representation.

III

Therefore, in this study, the *screen topos* is never fixed, but rather wanders through multiple places and representation systems. We can find this in the technological media apparatuses, as an architectural element, as the mechanism of subjective formation, and also in the same design process. From this perspective, I conceived the *screen* as a practice, not simply as a material piece of technology. Therefore, the name of the thesis, 'Screening Domesticity', does not just reveal but also displays and exhibits what is discovered. In this regard, 'by design' becomes a productive method of enquiry. Drawings, physical models, installations and multi-media denote material manifestations, the signifiers of a hidden and complex structure spanning the domestic image and its viewer. This, certainly, involves a high level of speculation, although rigorously employed. As we shall see, optical relations are identified through media manifestations. However, when this specificity is suspended, unpacked and deconstructed by the design component, these relations are simultaneously reinserted, otherwise *screened* into the field of representations. Therefore, I am also interested in a material restoration – which is its recovery.

This is very important, given that I consider Lacan's scopic drive as a media *dispositif,* from the point of view of its circuit-based economy, articulating a complex interplay between demand, desire and visual gratification. This drive is a perpetual and constant circuit eluding *object a* in pursuing its metonymic representation — whose encounter can be considered to be a glitch in the system. It is the psychoanalyst's task to isolate each of its components in order to 'unearth' the repressed thoughts at play in it. Accordingly, psychanalysis is regarded as being an 'excavation' practice that can be employed as an archaeological metaphor for the excavation of the unconscious. But while psychoanalysis, as a therapeutic practice, is concerned with the analysis of the patient, who must speak out his mental images for the analyst to uncover the repress thoughts and experiences; psychoanalysis, as a visual methodology, is concerned with the image and its viewer. Therefore, the viewer's own operation of the scopic drive is exhumed from the image, being their own process of subjectification. Consequently, in this study, the allusion of media archaeology operates in two ways: firstly, as the recognition of other media practices beneath the surface of its image-based representation; and secondly, as the identification of the intricacies of the viewer's subjective conditions.

IV

In the first chapter, I revisit Adolf Loo's *Villa Müller* (Prague, 1930), and Pierre Chareau's *Maison de Verre* (Paris, 1932), through the photographic medium which operates as an infiltrator of their interior. Despite their different architectonic languages (material representation, programmatic and spatial articulation etc.), both interiors are experienced as being visually removed from the outside, articulating private and public contingencies through a series of vantage points regulated by their material and lighting conditions. The chapter situates some of the existing literature, exploring the intersection between domesticity, media and visuality. Through a series of floor plan drawings, I 'excavate' the spatial configuration of the house in order to produce an optical excision of its architecture in relation to various subjects and materials. The floor plan drawing is a fundamental component of this optical excision because it enables me to allocate the different visual categories recognised through the photographic medium and written material. Furthermore, in locating the different categories, the floor plan renders visible the intersections and associations that have arisen between them. Therefore, this is not a sequential procedure, but rather a simultaneous process of identification and distribution. The floor plan is treated as an image that can be cut-out, manipulated and reconfigured, constructing new associations and relationships — in the same way, the film technique of montage is able to construct new meanings from the relationship between the shots. It is through the montage technique that hitherto, unrelated visual fields have begun to interact in a new optical structure, in a new domestic interior which is not only concerned with its programmatic function, but also with its subjective formations from its optical relations.

In Chapter 2, I explore Charles and Ray Eames' Case Study N°8 alongside the new media technologies developed in the context of the Cold War domesticity. The interior is approached through the lens of the film *House: After Fie Year of Living* (1949), which was produced by the Eameses through a series of photographic slides taken during the first five years they lived in the house. The film, produced at the background of the new information economy in the US, and the new research on visual cognition, display the interior through a rhythmical disclosure of a series of still images at unusual angles, perspectives and velocities. Using the floor plan as a plane of reference and as a coordinates grid, I trace the position of the photographic camera inside the house as well as the images which it projects. The procedure displays the agency of the film in order to reveal and conceal other spaces of the house simultaneously. Nevertheless, while this may appear to be reductionism, the mapping opens a series of discussions on the techniques employed in the film, which kind of repress the photographic image, masking or screening it, under its technological artifice. This became a regular practice in the work of the Eameses, who consistently experimented with various media forms, combining architecture and the design of furniture with film, photography, animation, computer knowledge and different communication techniques. Consequently, I approach the film under the theoretical frame of the *dispositif*, exploring the subjective 'disposition' of a viewer in a highly-ideological environment concealed under the surface of the film. However, most importantly, its material consequences, as if certain disposition between the house, the camera, the image and the viewer could be spatialised, domesticated and mapped back into the Cartesian space, thereby proposing new and alternative modes of viewing it.

While the Eameses' interior is revisited through an emergent information economy in the context of the Cold War, the third chapter addresses the new media practices at the beginning of the twentieth century. *Nautilus* was an art installation in Santiago de Chile in the year 2000, where a 21-year-old actress lived for two weeks in a totally transparent glass house in the city centre. The project opened at the time, a series of discussions in relation to the transparency of inhabitation, but most importantly, in the media agency, particularly in television, which distorted, if not emphasised the intentions of the architects. Through its televised images, *Nautilus* became a television show of sexually-charged domestic routines. The zoom effect of the camera flattened on the television surface, both the transparent glass and the surface of the body, exhibiting a fetish image of the house. In an attempt to disentangle and distinguish different media practices operating through the television image, I used Erkki Huhtamo's concept of *topos*, literally media clichés. Thus, it is possible to identify some recurring advertising strategies present in the television images, but also other more contemporary media practices operating in the project such as web-camming and the phenomenon of reality television shows. The design approach attempts to recognise *Nautilus'* intermedial attribute, recuperating other media practices

in its performance as an art installation. This can be referred to as 'remediation' (a term coined by Jay David Bolter, and Richard Grusin)[2], while simultaneously disseminating the images throughout the different channels; namely 'media convergence'. Therefore, *Nautilus*, as domestic interior, does not concern the object or its image but, rather, it is the medium through which we access the image. This means an understanding of each medium as an assemblage of discourses shaping and modelling our visual experience. Therefore, this final case study proposed to 'remediate' *Nautilus* by inserting a dialogue taken from the film, *Paris, Texas* (1984), which de-contextualises the images, displaying the domestic interior under an alternative viewing condition.

V

The following section, as part of the introduction, begins with a literature review of media archaeology, where I situate some of the different approaches to the discipline. As Vivian Sobchack argues, media archaeology is an "undisciplined discipline"[3]; therefore, is not my intention to reconcile the different approaches, but rather to attempt to find, where possible, points of convergence between some of them. However, the main intention is to demonstrate that it is precisely the variety of approaches (something for which it has been criticised) that makes the discipline of media archaeology quite productive. In the following literature review, I recognised Huhtamo's screenology as being an important approach to the study of the screen, but also Friedrich Kittler's understanding of the media as playing a fundamental part in the development of psychoanalysis. In this sense, psychoanalysis is considered as a discipline that approaches the unconscious as if it is a media apparatus, opening some synergies between media studies and psychanalytic theory.

I shall then proceed with a discussion on the modern conditions in the metropolis at the beginning of the twentieth century. Framing the discussion under some of Walter Benjamin's readings and Massimo Cacciari's philosophical nihilism, the domestic interior is approached in relation to the experience of modernity and the notions of the interior as a place of seclusion, suspending and resisting the commodification of all aspects of life. In this chapter, I explored the *screenness* of domestic space, as a space that screens out the new conditions of the capitalist economy of the metropolis while constructing in its interior a world within itself. Inhabitation is purely interior, a severance from the outside world; while architecture participates materially in this separation, the concept of the mask (or screen) appears to be equally applied as a *topos* to the metropolitan subject. Therefore, a consistent theme emerges in relation to the capacity of the subject to be screened, or to shield himself from the city stimulus. The screen, as a defence mechanism against social, cultural and technological innovation, began to be used as a metaphor for the construction of the identity of modern subject, which somehow started to intersect new media practices.

2 J. David Bolter and Richard A. Grusin, *Remediation : Understanding New Media*, First MIT press paperback edition. ed. (Cambridge, Mass. ; London: MIT Press, 2000).

3 Vivian Sobchack, "Afterword: Media Archaeology and Re-Presenting the Past," in *Media Archaeology: Approaches, Applications, and Implications*, ed. Erkki Huhtamo and Jussi Parikka (Berkeley ; London: University of California Press, 2011), p. 323.

1.1 On Media Archaeology: A Literature Review

In the book, *Media Archaeology: Approaches, Applications and Implications* (2011), Erkki Huhtamo and Jussi Parikka gather and formally introduce a series of practices within the field of media studies that they describe as media archaeology. Influenced mainly by the work of Michel Foucault in *The Archaeology of Knowledge* – and also by historians and theorists such as Walter Benjamin, Siegfried Giedion, Ernst Robert Curtius, Dolf Sternberger, Aby Warburg, and Marshall McLuhan — media archaeology suspends the general acceptance of a linear history, underpinned by the technical and chronological development of media artefacts.

Media archaeology, they say, analyses the function, operation, and discourses around media manifestations, tracing new unities and relationships between the past and the present: it "excavates the technological condition of the sayable and thinkable, and strongly critiques narrative media history."[1] Media archaeology also views the present in relation to a past while paying attention to discontinuities and ruptures that can establish potential new unities. Huhtamo and Parikka pointed out:

> On the basis of their discoveries, media archaeologists have begun to construct alternate histories of suppressed, neglected, and forgotten media that do not point teleologically to the present media-cultural condition as their 'perfection'. Dead ends, losers, and inventions that never made it into a material product have important stories to tell.[2]

Media archaeology appears to blur distinctions between the old and the new,[3] whereby media technologies from the past seem to haunt novel media. Although they may not resemble new technological features, the way they are contextualised, used, and the imaginary narrative that surrounds them, means it is possible to find traces of the past embedded in the present.

However, what becomes problematic — reflected on by Huhtamo and Parikka from the very beginning — is the lack of consensus in media studies as to how media archaeology operates as a research methodology. Huhtamo and Parikka state that: "there is no general agreement about either the principle or the terminology of media archaeology."[4] Thus, their book is presented as an 'open forum' where different approaches operate as an exploratory tool, triggering different voices expousing the obstacles and expectations of the discipline.

1 Wendy Hui Kyong Chun and Thomas Keenan, *New Media, Old Media : A History and Theory Reader* (New York ; London: Routledge, 2006).

2 Erkki Huhtamo and Jussi Parikka, *Media Archaeology : Approaches, Applications, and Implications* (Berkeley ; London: University of California Press, 2011), p. 3.

3 Jussi Parikka, *What Is Media Archaeology?*

4 Huhtamo and Parikka, p. 2.

However, what can be considered at first a limitation — a discipline where methodology seems to be in constant scrutiny — becomes, according to the authors, an advantage. Furthermore, it has been argued that it is precisely its ambiguity as a methodology that has made the discipline of media archaeology so fertile in the field of media studies. As the authors contend, media archaeology has the advantage of traversing different disciplines within the field of social science, the humanities, and the field of art.

Furthermore, written a few years later (2012), Parikka's monograph *What is Media Archaeology*, describes media archaeology as a discipline that is interested in much more than the "writing of historical narratives."[5] He defines media archaeology as a field in which the media artist deploys their own exploration of the past to investigate the so-called 'new media'. In his book, Parikka makes an unusual parallel between the steam punk culture and media archaeology. As he points out:

> In a similar way to the steam punk DIY spirit, media archaeology has been keen to focus on the nineteenth century as a foundation stone for modernity in terms of science, technology, and the birth of media capitalism. Media archaeology has been interested in excavating the past in order to understand the present and the future.[6]

Parikka's book is concerned with finding new ways of understanding the digital media culture. In this sense, digital media is seen as a combination of past and new media in what can be called 'remediation', a term coined by Jay David Bolter and Richard Grusin in their book *On Remediation: Understanding New Media* (1999). Remediation erases the distinctions between the old and the new, where a medium is "incorporated or represented in another [medium]."[7] For Bolter and Grusin, remediation can work as a form of reciprocal exchange: either an old medium incorporates the technology and practices of a novel medium (as when a film relies on digital technology for a scene) or vice versa (as when a film is seen on television or on the computer screen). It is precisely this latter definition that leads Parikka to understand digital media as 'zombies', "living dead that found an afterlife in new contexts, new hands, new screens, and machines."[8]

However, as noted previously, there are different positions within the broader field of media archaeology. This ambiguity stems mostly from the fact that it emerges from different readings and interpretations of Foucault's main body of work, notably *The Archaeology of Knowledge.*[9] According to Huhtamo and Parikka, in understanding its origins and preoccupations, it is usually possible to distinguish two different attitudes: the Anglo-American socially and culturally oriented approach — presented in the work of Tom Gunning, Anna Friedberg, and Erkki Huhtamo[10] — versus German technological determinism,[11] reflected in Friedrich Kittler's more materialist focus on hard-core/hardware. The former places an emphasis on content, users and representations.[12] It is precisely the context within which technology is produced (i.e. the discourses around a given artefact) that causes such technology to exist in the first place. Therefore, according to an Anglo-American approach, technological media is the consequence not the cause of shifting relations between knowledge and power manifested in a discursive formation.

However, that a 'technological determinism' emerges from Foucault's archaeological method — preoccupied with discourse analysis — can only be explained by an alternative interpretation or distortion of the method Foucault posits. This is because Kittler, in his own interpretation of the archive, challenges the manifestation of the text as the main and only object of discourse, claiming that today's archive is not only a collection of written documents but also a place where discourse becomes embedded in new technological media. Thus, Kittler' archaeological task is to question the un-mediatised interpretation of the printed world while analysing new storage technology and modes of communication in the post-printed era.[13] As he says:

> Even writing itself, before it ends up in libraries, is a communication medium, the technology of which the archaeologist [Foucault] simply forgot. It is for this reason that all his analyses end immediately before that point in time at which other media penetrated the library's stacks. Discourse analysis cannot be applied to sound archives and tower rolls.[14]

Multi-media is not only replacing the written document, it is disseminating it beyond the archive.[15] Thus, to understand the new technological media, Kittler refers to its material processing, signals, and the way information is organised and constructed within the artefact itself, leaving the content of the media in the background [fig. 1.1]. This approach has been subsequently developed by the professor of media theory at the University of Humboldt in Berlin, Wolfgang Ernst.

Ernst's work tends towards a more materialistic practice of media archaeology. His interest is directed towards a new understanding of media materialism, one in which the media device is studied in relation to flows, processes, and signals, rather than mainly in relation to its material presence.[16] Ernst's work privileges the agency of the machine above any other mode of cultural expression and form of narrative, as Parikka explains:

> [for Ernst] it is the machine in which the past gets archived as monument and that is the true subject of technical media culture, not the spectre of the human subject idealistically looming between the words and summoned by modes of literary writing.[17]

A characteristic that distances him from other media archaeology theorists is his insistence on pursuing the "epistemological conditions of technical media."[18] Ernst rejects the idea of textually based research in media archaeology. As he says:

> Rather than being a nostalgic collection of 'dead media' of the past, assembled in a curiosity cabinet, media archaeology is an analytical tool, a method of analysing and presenting aspects of media that would otherwise escape the discourse of cultural history. As long as media are not mistaken for their mass-media content, they turn out to be nondiscursive entities, belonging to a different temporal regime that, to be analysed, requires an alternative means of description.[19]

1.1 — The Media Archaeological Fundus (MAF). Humboldt University, Berlin.

5 Parikka, p. 2.

6 Ibid.

7 J. David Bolter and Richard A. Grusin, *Remediation : Understanding New Media*, First MIT press paperback edition. ed. (Cambridge, Mass. ; London: MIT Press, 2000), p. 45.

8 Parikka, p. 5.

9 Foucault's "archaeological method" is thoroughly described and analysed in: *The Archaeology of Knowledge*. However, it was also used by him in previous work such as *Madness and Civilization* (1969), *The Birth of the Clinic* (1963), and *The Order of Things* (1969). See: "Operative Media Archaeology: Wolfgang Ernst's Materialist Media Diagrammatics," *Theory, Culture & Society* 28, no. 5 (2011); *What Is Media Archaeology?*

10 Operative Media Archaeology: Wolfgang Ernst's Materialist Media Diagrammatics."

11 Huhtamo and Parikka

12 Parikka, "Operative Media Archaeology: Wolfgang Ernst's Materialist Media Diagrammatics."

13 Friedrich A. Kittler, *Gramophone, Film, Typewriter*, Writing Science (Stanford, Calif.: Stanford University Press, 1999), p. xx.

14 Ibid.

15 Chun and Keenan.

16 Parikka, "Operative Media Archaeology: Wolfgang Ernst's Materialist Media Diagrammatics."

17 Ibid., p. 55.

18 Ibid.

19 Wolfgang Ernst, "Media Archaeography, Method and Machine Versus the History and the Narrative of Media," in *Digital Memory and the Archive*, ed. Jussi Parikka (Minneapolis: University of Minnesota Press, 2013), p. 56.

For Ernst, media archaeology should look at culture by analysing "noncultural dimensions of the technological regime."[20] The operativeness of the media device (whether this is considered 'old' or 'new') is the true site for the media archaeologist, not the constant search for its periodisation. He describes media archaeology as *media Archaeography*, where the agency of writing is shifted from human action to the hardware of media machines.

The division between an Anglo-American attitude and German technological determinism is useful to understand two contrasting approaches to the discipline of media archaeology. However, this binary category runs the risk of becoming a reductionist view of the discipline. Indeed, it is precisely the diversity of its multiple strategies that characterises the practice of media archaeology. Thus, it would be inaccurate to claim, for example, that the work of Huhtamo — a collector of pre-cinema optical devices — is not preoccupied with the technological manifestation and operation of the media, or that Kittler, in his materialistic emphasis, was not concerned with the discourses that arisen as a consequence of the new media technology. In fact, Kittler's work is characterised by the development of a critical focus on the synergies produced by the new technological media and the psychoanalytic theory developed by Jacques Lacan.

1.1.1 Kittler's Feedback Loop

For Kittler, modernism emerged from the rupture in "technology and institutions that allow a given culture to select, store, and process relevant data."[21] He argues that the irruption of new media technologies marked an inflection point in the way language mediated between subjects and the outside world — replacing the modes in which the world had hitherto been represented. With the advent of new technological devices, literature was no longer the sole guarantor of cultural exchange[22] (knowledge and culture), but one among other technological media such as cinema, photography, or phonographs. As Kittler argued: "The dream of a real, visible, or audible world arising from words has come to an end."[23] Accordingly, with the development of new media technologies,[24] the subject has been displaced as the centre of meaning. Consequently, it is now possible to record images and sounds of the world without the intervention of a subject mediating the representation, as with painting, drawing, or musical notation.

The modes of communication that have emerged in modernity have altered the very condition of the subject, provoking a constant tension between an anthropocentric position and a more radical post-human attitude to media.[25] These two conflicting positions are illustrated on one hand by Marshall McLuhan, for whom media were "extensions of man"[26]; and on the other by Kittler for whom media "determine our situation"[27] — a position that emphasises the agency of the machine and demotes human agency.

It is precisely this dominance what leads Kittler to theorise technological media alongside its consequences for the emergent discipline of psychoanalysis. He suggests that machines now operate not only at the level of muscles but also at the level of the nervous system.[28] Therefore, Kittler finds in the functions of the gramophone, typewriter, and film an equivalence to the three Lacanian orders: the *real, symbolic,* and the *imaginary.*[29] He proposes the typewriter to be a machine corresponding to the symbolic order, where language is now constructed by a finite system of differences and the elements of the machine. The fragmented body, assembled through the external image of the child (reflected upon the mirror), is enacted by film's capacity to amaze its spectators and thus the fragmented body on the film screen is overridden by its illusion of movement.[30] The gramophone is for Kittler, the first technological device that was able to record all the sounds and noise uttered prior to any conception of language, thus implementing the conditions of the real.

The emergence of psychoanalysis cannot be understood outside the emergence of technological media apparatuses informing, improving, and even overriding[31] human sensory functions. Furthermore, in his work on the media, Kittler proposed that Freud's concept of the functioning of the psyche only makes sense in relation to the communication technology that was available to him, stating:

> Freud's materialism reasoned only so far as the information machines of his era — no more, no less. Rather than continuing the dream of the Spirit as origin, he described a 'psychic apparatus' (Freud's wonderful word choice) that implemented all available transmission and storage media.[32]

An example of this would be the role played by the phonograph in the exploration of the unconscious. In psychoanalysis, alphabetisation can be considered a screen for a repressed sexuality; and language the system by which a subject's unconscious is exposed. In such a revelation, the patient does not write but must speak out. In the process of unmasking, 'typographical errors' — the exposure of the unconscious — can only be identified through hearing and not through writing. Thus, "psychoanalysis works like a phonograph,"[33] as the machine is the only media device that can register the patient's typographic errors (repressed thoughts). Following Freud's suggestion of the 'talking cure', psychoanalysis works by means of media transposition: the doctor's ears correspond with the recording machine. As Kittler states: "Technologies and the science of media transposition do not simply extend human capacities: they determine recording thresholds,"[34] namely the gap between what is perceived directly by the human senses and what is recorded by the machine.

His technological determinism led Kittler to criticise Jonathan Crary's *Techniques of the Observer* for its limited concern with the human body. In his book, Crary suggests an important rupture occurred at the beginning of the nineteenth century in the way classical vision was conceived and represented. He argues that these changes were related not only to the technological advancements in new media apparatuses but also to a new relationship between visual perception and the human body.[35] Crary invokes an increased interest in the physiology of vision as the inflection point that superseded an old mode of perception represented by the camera obscura as the site in which technological and discursive subjects converge.

The interiorised observer, detached from an exterior world where the image appears to be removed from the viewer as an external construction (decorporealised vision), was replaced by the idea of a vision that is experienced bodily.[36] Using Goethe's colour experiments and those carried out by the Weber brothers and Gustav Theodor Fechner (who ended up almost blind as a result of staring at the sun when conducting his experiments), Crary demonstrates how vision is now conceived of as the convergence of the observer's bodily experience and the thing being observed. Fundamental to his proposal is the denial of any technological determinism, thus evading the notion of photography and film as important mechanical apparatuses that redefined human perception.[37]

For Kittler, Crary's anthropocentrism misses the point that the material effects of lights are subjected not only onto the human

20 Ibid., p. 61.

21 Friedrich A. Kittler, *Discourse Networks 1800/1900* (Stanford, Calif.: Stanford University Press, 1990), p. 369.

22 Matthew Griffin, "Literary Studies +/- Literature: Friedrich A. Kittler's Media Histories," *New Literary History* 27, no. 4 (1996).

23 Kittler, *Gramophone, Film, Typewriter*, p.14.

24 I am using the term 'media technology' as described by Friedrich Kittler as: "The ability to record data technologically." *Discourse Networks 1800/1900*, p. 229.

25 Nicholas Gane, "Radical Post-Humanism:Friedrich Kittler and the Primacy of Technology," *Theory, Culture & Society* 22, no. 3 (2005).

26 McLuhan, Marshall. *Understanding Media : The Extensions of Man*. Edited by W. Terrence Gordon. Critical edition. (ed. Corte Madera, CA: Corte Madera, CA : Gingko Press, 2003)

27 Kittler, *Gramophone, Film, Typewriter*, p. xxxix.

28 Ibid.

29 The real, symbolic, and imaginary; are the three psychic registers developed by Jacques Lacan. They constitute the different registers of psychic phenomena. See: Jacques Lacan, Écrits : A Selection (London: Tavistock Publications, 1977).

30 In Jean-Louis Baudry, "Ideological Effects of the Basic Cinematographic Apparatus," in *Narrative, Apparatus, Ideology : A Film Theory Reader*, ed. Philip Rosen (New York: Columbia University Press, 1986). Jean Louis Baudry also compares the Lacan mirror stage with the imaginary identification on the film screen by the spectator. This comparison is also discussed by Christian Metz in Christian Metz, *Psychoanalysis and Cinema : The Imaginary Signifier*, Language, Discourse, Society (London: Macmillan, 1982).

31 For example, film or any other optical device like the zoetrope, or the less well known praxinoscope théâtre that exploits the stroboscopic effect in which the eye cannot capture the speed with which the still images are shown, producing the illusion of movement.

32 Friedrich A. Kittler and John Johnston, *Literature, Media, Information Systems : Essays*, Critical Voices in Art, Theory and Culture (Amsterdam: GB Arts International, 1997), p. 134.

33 Friedrich A. Kittler, Geoffrey Winthrop-Young, and Michael Wutz, *Gramophone, Film, Typewriter*, Writing Science. (Stanford, Calif: Stanford University Press, 1999), p. 284.

34 Kittler, *Discourse Networks 1800/1900*, p. 284.

35 Jonathan Crary, *Techniques of the Observer : On Vision and Modernity in the Nineteenth Century*, October Book (Cambridge, Mass. London: MIT Press, 1994).

36 Ibid.

37 Friedrich A. Kittler and Anthony Enns, *Optical Media : Berlin Lectures 1999* (Cambridge ; Malden, MA: Polity, 2010).

body but also — as in the case of the chemical reaction on the photographic plate — onto technical media.[38] Moreover, Kittler radicalised the idea of this new human vision as the outcome of an emergent optical media when he claimed: "We knew nothing about our senses until media provided models and metaphors."[39] Kittler contended that this epistemological change is due not only to new experiments involving lights on the human eye but also the new mechanical media[40] that serve as a model for understanding our senses. For him, this apparent mutual modelling[41] is not accidental; it is resolved by the idea that technical media deceive our own perceptive qualities, which are not fixed but simultaneously discovered and overridden by the media.[42]

1.1.2 Media Archaeology as Symptom

As part of its heterogeneity, media archaeology also permeates the field of film studies. For the media theorist Wanda Strauven, media archaeology emerged precisely as a part of early cinema studies, where it attempted to address three conditions: attention for otherness (what); discovery for multiple origins (when); and the study of its contextual material (where).[43] Strauven contends that, although media archaeology is characterised by an array of different approaches, intentions, and methodologies,[44] it is still possible to identify the following important aspects that of each of their various modes of practice have in common: the relationship between history and theory; a significant link between researchers and artists; the essential role played by the archive; and a rethinking of temporalities.

Thomas Elssaeser, for example, approaches media archaeology as a *symptom* rather than a method.[45] For him, media archaeology is the symptomatic effect of a crisis within and beyond the scope of film studies. This is characterised by a *loss of belief in progress*; the doubts emerging from an idealistic conception of technical and cultural improvement as an accumulation of knowledge that leads only to human perfection. Thus, rather than asking what media archaeology is, one should ask: why media archaeology (now)?[46] In this respect, Elssaeser aligns closely with Wolfgang Ernst in suggesting that media archaeology operates as a self-reflective discipline – one in which its intrinsic manifold, multi-directional, and diverse mode of approach is nothing more than the mirror image of the same ideologies it is intended to examine. Thus, through media archaeology, the history of cinema is diversified, multiplied, and disseminated towards various roots, places, and moments of emergence. Notably, the *symptom* has become the *cure* that allows a broader understanding of the discipline itself, and also the very moment of our times.[47] As Elssaeser says:

> As so often in the humanities, it is the inherent reflexivity and self-reference — what we used to understand by the term critique — that justified certain procedures and approaches, not the problem-solving routine of the hard sciences…In this perspective, media archaeology is only one among several parallel developments, where the discipline becomes reflexive in order to redefine its object of study.[48]

For Elssaeser, media archaeology permits the idea of an 'early cinema' as a separate episteme, detached from conventional cinema history; one that favours and shares formal codes of narratives as a novelistic unfolding of a storyline, and is a simulated reconstruction of reality. It is through media archaeology that it becomes possible to re-discover and understand how early cinema responds to a different audience and the contexts in which diverse modes of the performance of the moving image were implemented.[49] However, in this revision of history, Foucault's archaeology of knowledge was not the only catalyst for the discipline.

The precipitated interruption of new media proliferation and its almost immediate convergence in new devices (hardware and software) left media theorists *shocked*;[50] however, it also led them to research all its multiple origins. In this regard, media archaeology seems the right approach as a linear account of history could not explain the complexities with which all the different technologies and their convergence *came into being*.[51]

In this context, an insightful analysis is provided by Tom Gunning, who describes early cinema as a *Cinema of Attractions*. This name derives from Sergei Eisenstein's search for a new mode of theatre that would undermine its narrative and realistic performance, as well as its association with the fairground.[52] The 'attraction' was one among other spectacles at the fairground, and — according to Gunning — it is important to remember that early cinema was closer to this kind of spectacle than the theatre. The *Cinema of Attraction* is an exhibitionistic cinema that breaks the illusion of watching another world in which the spectator has no agency. This illusion is broken by the look actors direct towards the camera, making visible the presence of the camera and seeking the attention of the spectator rather than serving as a mode of narrative. The *Cinema of Attraction* not only operates as an alternative mode of film, it also functions as a different viewing experience that includes the performance of a showman alongside the film, and sometimes the transformation of the theatre as simulating a variety of different types of interiors. According to Gunning, "Every change in film history implies a change in its address to the spectator, and each period constructs its spectator in a new way."[53]

When applied in the field of film studies, media archaeology appears to focus its attention on the content of media, the interpellation of the image, and its viewing condition (the modes in which the viewer is situated in relation to the image/screen). As such, it involves the interplay between different positions or, as Vivian Sobchack argues, media archaeology is essentially an undisciplined discipline.[54] However, in an attempt to reconcile their different approaches, intentions, and methods, Sobchack proposed the concept of *presence* as the unified "epistemological framework"[55] that groups the different strands together.

In her account, media archaeology focuses on the conditions in which the absent past acquires (carries) a *presence* in the present. Presence is defined as the "transfer or relay of metonymic and material fragments or traces of the past through time, to the here and now."[56] It is present in operative *practice and knowledge*. This means that is not about the artefact but its "techno-historical event";[57] the epistemic configuration that different devices activate through their operative practice. It is this account, according to Sobchack, that integrates different approaches ranging from a strong understanding of the technical condition of media to its more imaginary dimension. This re-emergence of a practice grounded in the material presence or imaginary dimensions of an object makes its presence an uncanny manifestation that also challenges the hitherto "accepted order of things."[58]

1.1.3 Topos as a Form of Analysis

This uncanny manifestation of the media is explored by Erkki Huhtamo, a Finnish cultural historian, who uses the concept of *topos* as one possible mode of analysis for a variety of different cultural manifestations and their relationships with media devices. A topos (pl. topoi) — from the Greek 'to place' — is a stereotype repeatedly used for different purposes. For Huhtamo, topoi are applied in the advertising world as formulae in which new devices are inserted into the market with the impression of being *already known*,[59] an uncanny manifestation in which the new appears both recognisable and familiar. He describes this as a "vessel

38 Ibid.

39 *Optical Media : Berlin Lectures 1999* (Cambridge: Polity Press, 2010), p. 34.

40 I use the term mechanical media to refer to photography and film as opposed to other optical media, as Crary uses the example of the stereoscope, kaleidoscope, phenakistoscope and thaumatropes as objects that commercially exploited and trained human optical perception.

41 Geoffrey Winthrop-Young, *Kittler and the Media*, Theory and Media (Cambridge: Polity Press, 2011),

42 Friedrich A. Kittler and Anthony Enns, *Optical Media : Berlin Lectures 1999* (Cambridge: Polity, 2009), p. 36.

43 Wanda Strauven, "Media Archaeology: Where Film History, Media Art and New Media (Can) Meet," (2013).

44 Ibid. She identifies four different approaches: The old in the new, the new in the old, recurring topoi, and ruptures and discontinuities.

45 Thomas Elsaesser, "Media Archaeology as Symptom," *New Review of Film and Television Studies* 14, no. 2 (2016): p. 183.

46 Ibid.

47 Elssaeser explains how causality, as a method of research in the past, has moved to contingency. This is a result of our digital culture, in which a huge amount of data is generated and analysed mathematically, identifying regular patterns to calculate probable outcomes. Elssaeser points out that such an approach leaves an important residue of data, and it is precisely the purpose of media archaeology to look for these data and beyond probabilistic judgments.

48 Elsaesser, p. 192.

49 *Film History as Media Archaeology: Tracking Digital Cinema* (Amsterdam University Press, 2016).

50 Ibid., p. 39.

51 Ibid.

52 Tomas Gunning, "The Cinema of Attraction - Early Film, Its Spectator and the Avant-Garde," *Wide Angle-a Quarterly Journal of Film History Theory Criticism & Practice* 8, no. 3-4 (1986).

53 Ibid.

54 Vivian Sobchack, "Afterword: Media Archaeology and Re-Presenting the Past," in *Media Archaeology : Approaches, Applications, and Implications*, ed. Erkki Huhtamo and Jussi Parikka (Berkeley ; London: University of California Press, 2011).

55 Ibid.

56 Ibid.

57 Ibid. The phrase is taken from Kittler's book, *Gramophone, Film and Typewriter*, p. 229.

58 Ibid.

59 Erkki Huhtamo, "Dismantling the Fairy Engine: Media Archaeology as Topos Study," in *Media Archaeology: Approaches, Applications, and Implications*, ed. Erkki Huhtamo and Jussi Parikka (2011).

derived from the memory bank of tradition"[60] and relates it to Tom Gunning's concept of *déjà vu,* in which people's impressions of new technology remind them of similar reactions they have experienced in the past. Topoi are highly effective in the advertising world, where new devices are disguised through proven formulae that impress the consumer. However, topoi can also be described as illusions within which new devices mask old behaviours and discourses still in operation within the cultural tradition.

The term topos was also used by the German literary scholar, Ernst Robert Curtius. His work attempted to identify how cultural elements from antiquity were transmitted and preserved throughout history. Developing a method derived from linguistics, he recognised the use of topoi as the main vehicle by which tradition was transferred from one generation to another. The use of topoi can be traced back to the oral tradition, which was later absorbed into literary genres. Topoi not only reveal continuity; in their different modes, the use of certain topoi also expose cultural breaks. It is within this context that Huhtamo appropriates the concept of topos — extending and distorting its original definition — and transfers it to the field of media studies.

Huhtamo proposed six assumptions that diverge from Curtius' ideas.[61] Perhaps the most significant of these is that topoi are not limited to a literary tradition, they can also be a visual manifestation embedded in the design of the apparatuses as well as in the way people interact with them. Topoi, in Huhtamo's view, are active agents that operate in at least three different situations: as connectors to other cultural traditions; as commentaries and elaborations of media-cultural forms, themes, and fantasies; and as vehicles for the culture of attractions and discursive formulae used by the culture industry.[62] As he states:

> It is best to conceive the topos as a temporary manifestation of a persisting cultural tradition, linked by numerous threads with other cultural phenomena both from the past and from the cultural context within which the topos has made its appearance.[63]

The concept of topos is based on Huhtamo's view that a proper media history is concerned not only with different objects and the technologies contained within them but also the unfolding of discourses that inspire and direct the evolution of media culture. The three levels named by Huhtamo permeate many of his texts as he strives to establish a connection between different cultural manifestations and the development of media devices. For example, the idea of the cyborg as topos emerges as a vehicle for the culture of attractions and as a discursive formula in which its imaginary dimension operates as its condition of existence — a coupling between human and technology. In Huhtamo's view, ideas about cyborgs are a response to old fantasies and desires in which human biological functions and limitations are perfected and enhanced by pairing them with a machine. Huhtamo finds early examples of this in the representations of what he names the *Elephans photographicus* — the one-eyed monster or cyclops arising from the merging of the photographic camera and the photographer (whose body was typically covered with a dark cloth to avoid light falling onto the plates).

This is a recurring idea; a topos that repeatedly emerges ready-made when different gadgets such as radio devices, speakers, or television sets are mounted as heads on human figures. It has been used in advertising campaigns, artworks, music videos, and fashion shows, which also operate as an elaborator of media-cultural fantasies. Subsequently, the *Elephans photographicus* soon transformed into the notion of technology annexing human agency,[64] whereby technical artefacts trapped and reduced the actions of the human body. Huhtamo calls this the topos of "restraining machines;"[65] an idea that recalls Dziga Vertov's mechanical eye in which the glass lens of the film camera in *Man with a Movie Camera* appears not only to replace the eye but also to capture it [fig. 1.2].

60 Ibid.

61 The six assumptions are: 1-topoi are created, transmitted, and modified by cultural agents operating in historically specific circumstances; they are not unchanging archetypes or proto-images existing beyond culture. 2- Topoi are not limited to literary traditions: there are many kinds of topoi, including visual ones, and topoi can also manifest themselves as designs, such as machinery or a user interface. 3-Topoi undergo transformations that affect both their forms and their ideas; a topos can shift from one medium to another. 4-Topoi should be analysed not only internally within a topos tradition but also externally through relation to the cultural context within which they appear. 5-Not all topoi date from antiquity, some have emerged recently and may have short time spans. 6-Topoi should be researched as symptoms of both cultural continuity and ruptures. See: ibid., p. 34.

62 Ibid.

63 Ibid.

64 Huhtamo explains that, at first, technology was seen as totally detached from the human body, like an automaton, and an object only to be seen. This initial perception then changed to the idea of the machine as part of the human body, interacting with it and eventually taking it over, controlling human agency.

65 Erkki Huhtamo, "Cyborg Is a Topos," in *Synthetic Times : Media Art China 2008*, ed. Di'an Fan, Ga Zhang, and guan Zhongguo mei shu (Cambridge, MA. Beijing, China: MIT Press. National Art Museum of China, 2008), p. 68.

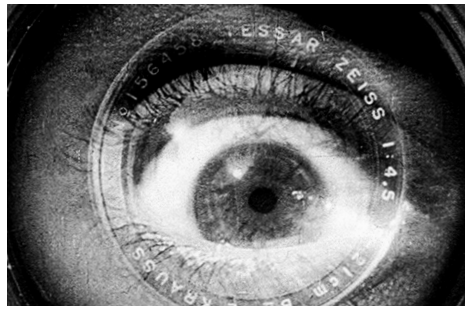
1.1.4 Screenology

Focusing on topoi, Huhtamo also excavates forgotten media and the discourses that surround them.[66] This leads him to an understanding of media history as a "cyclical phenomenon"[67], a recurring pattern that is suspended and activated in particular moments in time. Topoi can sometimes be consciously, ideologically, and commercially exploited and activated. For Huhtamo, media archaeology should also throw light upon the discursive traditions embedded in media devices, either real or imaginary, such as media objects that have existed only in the imaginations of people, as he believes that the final purpose of media archaeology should be to elucidate the social practices that are mediated by technological devices.

In his history of what he terms "peep practice,"[68] Huhtamo identifies another recurring topos as a connector to other cultural traditions. Commenting on Clay Calvert's *Voyeur Nation: Media, Privacy and Peering in Modern Culture*, Huhtamo observes that peeping can be seen as a symptomatic effect of different voyeuristic performances in history whose present form can be found on the internet. He recognises the massification of peeping practices in the public traditions of fairs and market places, in which he finds a recurrent topos: the distracted viewer, who becomes so fascinated with technology and immersed in it that he is unaware of his environment.[69]

He describes two narrative elaborations of this topos: the man who leaves his companion unattended to be kissed by another man while he is totally immersed in the machine;[70] and the peeper who falls victim to a pickpocket.[71] These kind of topoi emerge constantly in conjunction with any new optical device.[72] It is even possible to state that they respond to old fantasies or imaginary discourses, which each new media object (the novel) performs as its teleology. However, the main point made by Huhtamo concerns the ways in which these topoi — the immersive optical attitudes to consuming images — can be used as connectors to other cultural traditions. In this sense, Huhtamo recognises within the immersive experience of 'peep practices' cultural similarities and optical dispositions present in the history of the cinema screen. Thus, for Huhtamo, a study on 'screens' should not be limited to the history of cinema, the projection of images, or their movement on a surface; it should include other practices that entail a persistence of vision, mobility, tactility, peeping, and particular optical conditions. As such, peep media share a mode of practice and use that needs to be considered alongside the long history of other screens.[73]

Huhtamo's essay on peep practices reveals his fascination with new permutations of the screen, emphasising their relevance to our daily lives and the way in which we spend a significant portion of our days staring at and interacting with them without even noticing. Screens are now everywhere and have become an essential part of our routines — from the privacy of our homes to the public space of the streets. They have even developed into miniaturised and portable devices within which the public and the private merge into a liminal state.[74]



1.2 — Snapshot from the film Man with a Movie Camera. Dziga Vertov, 1929

66 Strauven.

67 Erkki Huhtamo, "From Kaleidoscomaniac to Cybernerd: Notes toward an Archaeology of the Media," *Leonardo* 30, no. 3 (1997).

68 "Toward a History of Peep Practice," in *A Companion to Early Cinema* (Blackwell Publishing Ltd., 2012).

69 "Cyborg Is a Topos."

70 In Huhtamo's description, within the drawings, cartoons, and visual representations in which he resorts, the viewer is always male. He also mentions a case in which the viewer is a mother, and the girl kissed by an officer is her daughter.

71 Huhtamo names the kaleidoscope, the telescope, the peepshow, the magic lantern, the camera, the stereoscope, and the mutoscope among others.

72 Using *The new Yorker* cartoons as examples, Vivian Sobchack analyses the consequences of the proliferation of screens in our daily lives. Using humour and irony, most depict a distracted user totally absorbed by the screen and unaware of his/her surroundings. See: Vivian Sobchack, "From Screen-Scape to Screen-Sphere: A Meditation in Medias Res," in *Screens : From Materiality to Spectatorship : A Historical and Theoretical Reassessment*, ed. Dominique Chateau and José Moure (Amsterdam: Amsterdam University Press, 2016).

73 Erkki Huhtamo, "The Four Practices? Challenges for an Archaeology of the Screen," ibid.

74 Ibid.

For Huhtamo, screens have become invisible to us; we do not look at them, instead we gaze at what they transmit and ignore the perceptual adjustment that operates between the screen and reality.[75] Huhtamo's interest in an appropriate study of 'screen practices' led him to develop a method called screenology, in effect a media archaeology of the screen.[76]

In his screenology, Huhtamo emphasises the difference between the screen as technical apparatus and the screen as dispositif.[77] The former refers to the technical device, its material technology, and mode of internal operation (mechanical, electrical, digital); while the latter refers to the discourses and social practices that surround its material manifestation and its cultural imagination,[78] In this regard, the idea of the dispositif, for Huhtamo, can be seen as a hybrid, a heterogeneous composite between the technology, its discourses, and the imaginary narratives within which they have been embedded. As he observes:

> In a similar way, the media screens that play important roles in both technical media apparata and the dispositives enveloping them have evolved parallel with imaginary ones […] I consider imaginary manifestations of culture equally real and essential as material ones. Screenology should investigate the often unpredictable relationships between the cultural imagination and the world of things.[79]

Thus, reality and fiction, certainty and aspirations constantly intertwine in a complex network of significations, thereby often blurring the distinctions between technological development and its imaginaries.[80]

75 "Screenology: Or, Media Archaeology of the Screen," in *The Screen Media Reader : Culture, Theory, Practice*, ed. Stephen Monteiro (New York: Bloomsbury Academic, 2017).

76 Ibid.

77 The term dispositif is taken from the French film theorist Jean-Louis Baudry who focused on the subjective conditions in which cinematic images are produced and consumed. See: Baudry; "The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema ."

78 Huhtamo, "Screenology: Or, Media Archaeology of the Screen."

79 Ibid., p. 80.

80 Eric Kluitenberg, "On the Archaeology of Imaginary Media," in *Media Archaeology : Approaches, Applications, and Implications*, ed. Erkki Huhtamo and Jussi Parikka (Berkeley ; London: University of California Press, 2011).

1.2 On Screens

According to the *Oxford Dictionary of English Etymology*, the word 'screen' appears as noun and as verb. For the former case, it defines it as: "A fixed or movable upright partition used to divide a room, give shelter from draughts, heat, or light, or to provide concealment or privacy."[1] And for the latter, as verb, it gives it as: "conceal, protect, or shelter (someone or something) with a screen or something forming a screen: *her hair swung across to screen her face*."[2] However, it was not until 1810 — and in the context of the magic lantern[3] — that the word obtained the sense of a surface upon which images are displayed[4].

Many attempts have been made in media studies to define what a screen is. In *The Language of New Media*, for example, Lev Manovich proposes a brief genealogy of the screen. Describing it as aggressive, a device that *screens out* whatever is not within its frame, he classifies screens into three different types: the classical screen, the dynamic screen, and the screen of real time. Although they completely differ in their modes of representation and the technologies involved in their operation, Manovich contends that they are all characterised by a frame that mediates "the existence of another space"[5] — between reality and virtuality — and by the similarity of their format. Thus, he places Renaissance painting and the computer screen alongside the classical screen [fig. 1.3 and 1.4], while the dynamic screen is one that allows the movement of images within this frame — the cinema and the television screen. For Manovich, it is the technology of the radar which leads to his third categorisation of the screen as that which is *updated in real time* [fig. 1.5].[6] Manovich's categorisation contest a linear history of the screen. In the case of the dynamic screen, he says:

> The dynamic screen also brings with it a certain relationship between the image and the spectator — a certain viewing regime, so to speak. This relationship is already implicit in the classical screen, but now it fully surfaces. A screen's image strives for complete illusion and visual plenitude, while the viewer is asked to suspend disbelief and to identify with the image.

However, Manovich's classification can be confusing and has been criticised by Huhtamo for its lack of precision. Television

1 Angus Stevenson, "Screen," (2010); Catherine Soanes et al., *Oxford Dictionary of English*, Second edition, revised / ed. (Oxford: Oxford University Press, 2005).

2 Ibid.

3 The device and technique of projecting shadow images onto a surface (a screen).

4 Robert K. Barnhart and Sol Steinmetz, *The Barnhart Dictionary of Etymology* (New York: H.W. Wilson, 1988).

5 Lev Manovich, *The Language of New Media*, Leonardo (Cambridge, Mass. ; London: MIT Press, 2001).

6 Ibid.

(categorised as the dynamic screen) can also transmit live images (a real-time screen) and, as Huhtamo notes, painting does not always share the same rectangular format.[7] However, in his attempt to categorise and define a certain operativity of the screen, Manovich offers a broader and more productive understanding that expands the focus on its technological configuration, analysing the screen through its format, mode of viewing, and the temporality of the image.

1.2.1 The Hybrid Configuration of the Screen

This form of analysis that escape a linear history of the screen is developed by the film and media theorist Anna Friedberg, who analysed the different manifestations of the screen through its metaphorical relation to the 'window'. In this respect, Friedberg expands Leon Battista Alberti's metaphor of the painting's frame as a "window" to Microsoft's Windows software.[8] The construction of its interface as a series of windows facing the viewer and a series of virtual screens within the material surface of the computer screen thus presents "windows within windows, frames within frames, screens within screens."[9] For Friedberg, Alberti's metaphor of the window serves as a measure of all the ensuing changes and discontinuities arising from the insertion of new technology, its consequences for alternative techniques of representation, and the construction of a viewing subject.

In *De pictura*, the transparency of Alberti's window is complemented by another device he had developed, the *velo* (veil), which is a grid made of fabric threads attached to a frame. The *velo* — similar to the one depicted in Albrecht Dürer's Draughtsman Drawing a Recumbent Woman (1525) [fig. 1.6] — was a semi-transparent device that allowed the image within the frame to be broken into several small squares, thus making easier the construction of the perspectival space over the draughtsman's paper. For Friedrich Kittler, this technique denotes the multiplication of Brunelleschi's single hole mirror device into 'a thousand eyes,' and, as Friedberg noted, formed a model for all the subsequent "bit-mapped computer screens."[10] From this perspective, the idea of the screen as a window emerges as Huhtamo's description of topos. Thus, although dressed in a veil of familiarity, new technologies can also mask new technological improvements or obscure ideological intentions. However, while Alberti's window rendered the space beyond its frame as transparent [fig. 1.7], the computer window

1.3 — The Arnolfini Portrait, Jan van Eyck (1434), A Renaissance painting as part of Manovich's "classical screen"

1.4 — The computer screen as part of, Manovich's "dynamic screen"

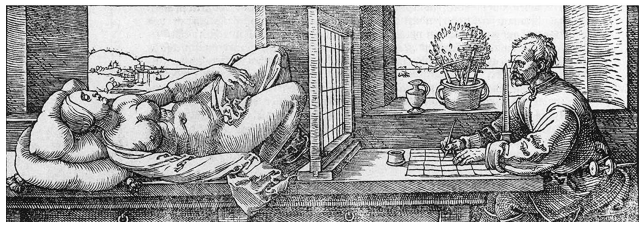
1.5 — The radar screen, Manovich's "dynamic screen"

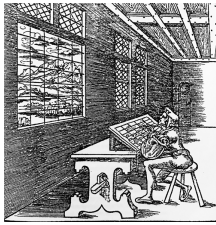
7 Erkki Huhtamo, "Screenology: Or, Media Archaeology of the Screen," in *The Screen Media Reader : Culture, Theory, Practice*, ed. Stephen Monteiro (New York: Bloomsbury Academic, 2017).

8 Anne Friedberg uses this metaphor in reference to Microsoft Window. Anne Friedberg, *The Virtual Window: From Alberti to Microsoft* (Cambridge, Mass. ; London: MIT Press, 2006).

9 Ibid., p. 2.

10 Ibid.





1.6 — "Draughtsman Making a Perspective Drawing of a Reclining Woman", Albrecht Dürer, ca. 1600.

1.7 — Illustration of Alberti's grid, from Johann II of Bavaria and Hieronymus Rodler (1531).

suggests the opposite.[11] Today, the surface of the screen shields its own operativity, its processes, and a larger inter-connected system of data collection.[12]

Through their concealment, screens mediate culture and technology, reality and representation, private and public, voyeurism and exhibitionism, and become thresholds, liminal spaces, and multiple mediators. In this sense, it is useful to look at the description given by Charles Acland, a Professor in media and cultural theory, who appears to challenge Manovich's categorisation of the screen, observing:

> The category of the 'screen' is baffling precisely because it is not in and of itself a medium, format, or platform. Rather, it is often an in-between manifestation of all three, one that materialises how we come to see and describe the differences and connections among television, film, computers, electronic signage, and digital spaces.[13]

Acland's description emphasises two important aspects: first, the understanding of the screen as a hybrid, a combination of at least three components operating in the production and representation of an image, and, second, how this integration creates specific viewing conditions. His understanding of the screen as hybrid is comparable to concept of 'assemblage', developed by the film and television theorist Francesco Casetti.

For Casetti, there is no such object as a screen independent of its context; a screen is the outcome of a process that entails a technological configuration along with a series of practices that produce it.[14] In this sense, Casetti defines the screen as an 'assemblage' that is not just technological but also ideological, where different preoccupations and interests converge and are put into practice. Casetti uses the panorama and the phantasmagoria as examples, both of which were different optical dispositives. While the former was ultimately engaged with the representation of huge landscapes and war scenes painted on the surface of a canvas, the latter — through a luminous projection — enacted

11 Ibid.

12 In her essay, Vivian Sobchack adopts a phenomenological and material approach to the study of the screen. See: Vivian Sobchack, "From Screen-Scape to Screen-Sphere: A Meditation in Medias Res," in *Screens : From Materiality to Spectatorship : A Historical and Theoretical Reassessment*, ed. Dominique Chateau and José Moure (Amsterdam: Amsterdam University Press, 2016).

13 Charles R. Acland, "The Crack in the Electric Window," in *The Screen Media Reader : Culture, Theory, Practice*, ed. Stephen Monteiro (New York: Bloomsbury Academic, 2017).

14 Francesco Casetti, "Genealogy of the Excessive Screens," in *Mellon Sawyer seminar*, ed. Yale University. (Yale University website: Mellon sawyer, 2017).

illusory and phantasmatic worlds.[15] For Casetti, both became important elements in the configuration of the cinema's screen. An understanding of the screen as an assemblage means that, within any of its multiple manifestations, it is possible to find the 'leftovers' of past components actualising other mediums.
In fact, as has already been said, Huhtamo's archaeological practice operates precisely as a procedure that pretends not only to unravel the hybrid configuration of the screen but also, using his concept of Topos, to historicise the *dispositif*. Thus, it articulates in history[16] different types of 'dispositions' and subjections previously ignored.

1.2.2 The *Dispositif* as Hybrid

The cinema screen has been the recurrent place where the concept of the *dispositif* has found fertile ground. Within the context of film studies, the word *dispositif* was first used by the French film theorist Jean Louis Baudry in two seminal essays, "Ideological Effects of the Basic Cinematographic Apparatus" (1970) and "The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema" (1975). Drawing on psychoanalytic theory — from Freud's understanding of psychic functioning to Lacan's concept of misrecognition — Baudry's dispositif refers to the 'disposition' of the viewer within the film theatre, a viewing condition activated by the *appareil de base* (referred to as the mechanism necessary to produce and project a film). Baudry discusses the metapsychological effect on the spectator, drawing parallels between the viewing conditions experienced inside the film theatre and the functioning of dreams. The cinema *dispositif* — which will be explored in more detail in the second chapter of this thesis — is a transhistorical model that views cinema as the final accomplishment of an old subject's aspiration, where desire was fulfilled by hallucination.

Combining Althussarian Marxism and psychoanalytic theory, the concept of *dispositif* thus refers to this hybrid condition of the screen: a technological mechanism that makes the projected image possible, the manifestation of a certain narrativity, and a viewing condition. This viewing condition — or disposition — is, according to Baudry, *ideologically* constructed, since what is produced on the screen is an 'impression of reality'. This means the subject constantly identifies with the camera, takes its place, embodies its monocular vision, and engages in a transcendental manifestation (sees everything in the film). As Baudry says:

> Thus, the spectator identifies less with what is represented, the spectacle itself, than with what stages the spectacle, makes it seem obliging him to see what it sees; this is exactly the function taken by the camera as a sort of relay.[17]

This impression of reality is suggested to re-enact the subject's own process of identification at work during the Lacanian 'mirror stage'. This is because, according to Baudry, like the surface of the mirror constructing the illusory perception of a completed figure of the child, the cinema screen produces the deceptive impression of a whole (moving images) out of the unnoticed fragments (photographic stills) of its parts.

1.2.3 The Psychoanalytic Screen

In Baudry's account, the screen is a paradoxical site that both displays and disguises, exposes and conceals. The screen as the final site of representation projects images while concealing all the operability and mechanisms behind their production. In this sense, it is perhaps Lacan's own concept of the *screen* rather than the *mirror* that constructs parallels with Baudry's *dispositif*. The screen, in Lacan's theory of subjective formation, emerges out of the encounter between two systems of vision: the conscious look and what he calls the *gaze* — the intervention of the unconscious in the field of vision. Like the operability of the cinema screen as dispositif, Lacan's screen conceals a series of psychic operations that allow a subjective representation of the world.

Even though his model of vision — nested onto the scopic drive — is a transhistorical model, one that remains inalterable in the face of cultural and historical changes, its theory can only be understood in relation to the increased emergence of technological media. However, before Lacan, it is possible to find in Freud's writings a different definition of the screen which he used to describe the operation of memory.

For instance, in his essay "Screen Memory" (1899), Freud used the mystic writing-pad, a child's toy, as a model for the operation of repressed memories in our psyche. He claimed that there are two forces constantly in action within our memory, one that maintains a particular experience in the field of remembrance and the other that avoids any kind of manifestation — one that displays and another that conceals. However, when an experience is traumatic for us, these two forces converge. Just like the mystic writing-pad — which like a palimpsest combines in a single surface 'residues' of an old drawing with traces of a new one — the memories overlap; forming a new experience that overlays the traumatic one. Thus, a new image of the original experience is formed, one that contain some elements of truth and some of fiction, a distorted impression of reality. The screen memory therefore acts like an empty canvas, a surface where the impression of our childhood is constructed through the retroactive projection of our past and preceding experiences. For the film historian Thomas Elssaeser, Freud's concept of memory — despite its analogy with the mystic writing-pad[18] — suggests the infiltration of technical media into his theory as a technical functioning of input, storage, and processing.[19]

While the development of new optical media can throw light on how the human body is theorised, it can also illuminate the relationship between conditions of subjectivity and new representational (media) technologies.[20] An example of this is Silverman's own analogy of the camera's operation as gaze, and the photographic surface as a Lacanian screen. In *The Threshold of the Visible World* (1996), Silverman discusses the identification photographs taken by the police of Algerian women. These are used to explain how the photographic representation operates as the Lacanian screen.[21] For instance, these photographs 'cut the reference' mortifying the real while simultaneously holding it in the realm of representation.[22] Furthermore, like the gaze, the camera affords the subject a specular body at the expense of her own being. As Lacan states: "[with the screen], reality appears only as marginal."[23] Furthermore, if this screen is considered in relation to desire, Silverman's discussion demonstrates how the Algerian cultural screen is replaced by the French colonial screen of "exoticism, primitivism, and subordinate race."[24] The point being made by Silverman is that Lacan's visual metaphors should also involve a discussion of how media devices, material practices, and systems of representation articulate the field of vision and shape our own understanding of reality. The irruption of technological media has had an immense effect not only on the urban landscape but also on the ways in which the subject is constructed and theorised.

15 Ibid.

16 It is important to remember that Huhtamo is a cultural historian and thus his interest lies in the discursive practices surrounding material manifestations and cultural techniques. See: Simon Ganahl, "From Media Archaeology to Media Genealogy: An Interview with Erkki Huhtamo," *Le foucaldien* no. Vol 2, Issue 1 (2016).

17 Jean-Louis Baudry, "The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema " in *Narrative, Apparatus, Ideology : A Film Theory Reader*, ed. Philip Rosen (New York: Columbia University Press, 1986).

18 In analysing the relationship between the conscious and the unconscious in the register of memory, Freud used the analogy of the mystic writing-pad — a child's toy organised by two systems that allow the child to write and erase what has been written on a wax tab. Likewise, memory operates using one system that receives the external stimuli of the world — our perception consciousness (*percepti*) — which leaves no traces and is at the same time protected by a shield against over-stimulation (a filtering device, a screen); and a second system that lacks perception but retains traces of it, the mnemic system. Both operate continuously as if the action of writing follows a continuous process of incrementing the sheets, allowing new perceptions to be captured. Sigmund Freud, *The Standard Edition of the Complete Psychological Works of Sigmund Freud / Vol.19, the Ego and the Id and Other Works : 1923-1925*, ed. James Strachey and Anna Freud, Ego and the Id (London: London : Hogarth Press and the Institute of Psycho-analysis, 1961).

19 Thomas Elsaesser, "Freud as Media Theorist: Mystic Writing-Pads and the Matter of Memory," *Screen* 50, no. 1 (2009).

20 Ruth E. Iskin, "In the Light of Images and the Shadow of Technology: Lacan, Photography and Subjectivity," *Discourse* 19, no. 3 (1997).

21 Silverman based her argument on Christian Metz's "Photography and Fetish", and Roland Barthes' *Camera Lucida*.

22 Kaja Silverman, "What Is a Camera?, Or: History in the Field of Vision," *Discourse* 15, no. 3 (1993).

23 Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, The International Psycho-Analytical Library (London: Hogarth Press, 1977), p. 108.

24 Silverman.

1.3 The Metropolitan Condition of Modernity

In modernity, the issue of the screen or the mask emerges as a recurring model, a kind of apparatus mediating between the modern subject and the over exhausting metropolitan stimuli. The topos of the screen meanders through multiple places and systems of representations. It can be recognised in the technological media apparata, as an architectural element, or as a mechanism of subjective formation with which to deal with the outside world. For example, in his essay "On Some Motifs in Baudelaire", Walter Benjamin describes the information flow of modernity as "shocks"[1] that constantly invade the perceptual apparatus of the subject. As he notes:

> Moving through this traffic [the city] involves the individual in a series of shocks and collisions. At dangerous intersections, nervous impulses flow through him in rapid succession, like the energy of a battery. Baudelaire speaks of a man who plunges into the crowd as into a reservoir of electric energy.[2]

Departing from Freud's theory of the correlation between memory[3] and consciousness, Benjamin explores the effects of Baudelaire's poetry on the metropolitan subject. Freudian theory describes consciousness as a person's capacity to deal with these shocks which forms a sort of screen — protecting them from traumatic effects.[4] For Benjamin, however, the assimilation of the city stimuli into consciousness means that protracted experience [*Erfahrung*] is lost and transformed into something which is *lived through*: a fleeting experience (experience expires in consciousness).[5] As Benjamin observes:

> The greater the share of the shock factor in particular impressions, the more constantly consciousness has to be alert as a screen against stimuli; the more efficiently it does so, the less these impressions enter experience [Erfahrung], tending to remain in the sphere of a certain hour in one's life [Erlebnis]. Perhaps the special achievement of shock defence is the way it assigns an incident a precise point in time in consciousness, at the cost of integrity and the incident's contents.[6]

1 Walter Benjamin, "On Some Motifs in Baudelaire," in *Illuminations*, ed. Walter Benjamin and Hannah Arendt (London: Fontana Press, 1992).

2 Ibid., p. 171.

3 Benjamin refers to *m*émoire involontaire, described by Proust, as the memory that emerges from the combination of individual and collective pasts which form experience.

4 Drawing upon Freud, Benjamin explains how consciousness is a screen, a protective shield against external stimuli whose function is the protection of the psyche from traumatic effects. Thus, a memory would be the product of a failure in consciousness: the breakdown of the protective shield. Benjamin.

5 Ibid., p. 157.

6 Ibid., p. 159.

For Benjamin, Baudelaire's poetry acts like a conscious screen within which the city's stimuli are neither traumatic nor lost in consciousness, but rather are experienced [*Erfahrung*]. Baudelaire's poetry successfully transforms *Erlebnis* [transient experience][7] into *Erfahrung*. This transformation is embodied for Benjamin in the figure of the *flâneur*, the possessor of a mutable subjectivity;[8] a male spectator roaming the streets of the large city, absorbing its impulses and following its rhythms — reconfiguring the limits between public and private spaces.

For Benjamin, the city as the purveyor of stimuli would later operate in an analogous way to the perceptual shocks produced by film. Moreover, for him, the process of production behind the optical illusions presented in film resembles the standardised movements of workers on the assembly lines of factories — an alienated condition in a capitalist society where the worker is subjugated to the automatic movements of production. Thus, technology and the machine are constantly training human senses and shaping the subject. In this new scenario, where everything seems to be ruled and measured by the machine, the need to consider the effect of the metropolis upon its inhabitants emerges.

1.3.1 Screening (out) the Metropolitan Experience

Based on the German sociologist and philosopher George Simmel's "The Metropolis and the Mental Life", the Italian philosopher Massimo Cacciari develops a dialectic of the negative as a form of philosophy that rejects the possibility of any synthesis of the modern condition. This refers to situations where conflicts emerging from capitalist society disappear or are neutralised.[9] Cacciari observes how these conflicts assume the form of a crisis that takes place in the Metropolis, a place where the "rationalisation of all forms of production" leads to the "rationalisation of social relations."[10]

Following Simmel's analysis, Cacciari argued that the Metropolis implies an intensification of the life of the nerves (*die steigerung des Nervenlebens*) caused by the rapid and interrupted transformation of external and internal impressions.[11] The metropolitan subject uses the intellect to respond to these impressions; strengthening their consciousness [*die steigerung des Bewusstseins*] as a screen, a protective 'organ' that ultimately transforms individual impressions into collective knowledge. Through a process of intellectualisation (that can only take place in the Metropolis), "simple and direct relations of production"[12] are transformed into an industrial strategy: use-value is transformed into exchange-value which, in return, is transformed back into use-value in a constant circle of exchange.[13] As Cacciari states: "the monetary economy formalises economic relations, just as the intellect formalises psychic relations and movements."[14] In the Metropolis, subjectivity is abstracted for the benefit of the market; the intense rationalisation assumed by society enables social relations to be ruled by the logic of production.[15]

In his analysis of the city, Simmel, according to Cacciari, fails to follow the negative thought to its conclusion, thereby formulating a position of synthesis. Simmel thus views the opposition between the *Nervenlebens* [life of the nerves] and *Verstand* [intellect] taking place in the Metropolis a liberating force. He reconciles these opposite positions at the level of *Verstand*, where the specialisation of the workforce functions as the path to achieve individuality (paradoxically stripped by the same Metropolis) and equality.[16]

In this new environment of stimuli, within which human senses are flooded with images, sounds, and the flow of information, and all things — according to the principles of the money economy — appear to occupy the same position,[17] the need for a response arises. According to Cacciari, the metropolis — as the place of rationalisation — requires a counterpoising opposite,[18] a shelter within which subjects can protect themselves from an emptying out of things that reduces everything to the pure exchange value of money, to a common measure. This place is the domestic interior, which attempts to evince the contrast between a world governed by the logic of production and a world that is not.[19] For Cacciari, the interior is a practice formed by the making of space through the collection of objects, and through their position and control — in short, through their 'domestication'. This compensation is discussed by Walter Benjamin in "Experience and Poverty", who described the domestic space as a place where subjectivity appears to be substantiated through the accumulation and possession of material objects. As he notes:

> If you enter a bourgeois room of the 1880's, for all the coziness that it radiates, the strongest impression you receive may well be, 'You've got no business here'. And in fact you have no business in that room, for there is no spot on which the owner has no left his mark — the ornaments on the mantelpiece, the antimacassars on the armchairs, the transparencies in the windows, the screen in front of the fire.[20]

In these interiors, the inhabitant is forced to adapt habits regarding his objects. Benjamin illustrates the bond between objects and the subject of the bourgeois interior through the usual expression of sorrow and irritability when an object breaks, as if what has been just lost is not the object itself but a fragment of the owner's being. However, in his descriptions of the bourgeois interior, Benjamin is not writing in a melancholic tone; instead, he attacks these interiors for being a "stimulus to intoxication and dream",[21] for its isolation from reality, and for maintaining the subjects in his 'illusions'. The bourgeois interior was construed as a place that promotes individuality, threatening in return the subject's own consciousness of an exterior rational reality.[22] This isolation from the exterior world is described by Benjamin as follows: "To live in these interiors was to have woven a dense fabric about oneself, to have secluded oneself within a spider's web, in whose toils world events hang loosely suspended like so many insect bodies sucked dry."[23]

However, by the nineteenth century, Walter Benjamin's bourgeois interiors no longer existed in complete isolation from the exterior. Instead, although constituting a refuge from the outside world, they are constantly responding to its condition. The interior constructs a complex 'surface' through the inhabitant's relation to the city[24] — allowing him/her to build a 'bourgeois identity' supported by their artefacts. For Benjamin, this practice of gathering maintains the 'illusions' of the collector, which is understood as the place within which exchange-value and use-value are supressed. As he states:

> The collector delights in evoking a world that is not just distant and long gone, but also better — a world in which, to be sure, human beings are not better provided with what they need than in the real world, but in which things are freed from the drudgery of being useful.[25]

For Benjamin, the division of the workplace from the dwelling place was not just physical but psychic; a place where the former sustains the private individual in his affairs, 'in reality', while the domestic interior sustains their 'illusions'. In this new world, both social and commercial concerns are excluded. The domestic space is the protective surface throughout which the illusion of a world — distanced from the market economy of the Metropolis — can be maintained. Thus, the collector is, for Benjamin, one whom in his act of gathering supresses the commodity fetishism of objects, or rather exchanges the commodity fetishism for the fetish of the 'authentic'. Both social relations and relations of exchange remain suspended and become 'traces' of the dweller's inhabitation.

1.3.2 The Domestic Interior

In her book, *Architecture and Modernity: A Critique*, the professor of architectural theory Hilde Heynen explores the relationship between modernity, dwelling, and architecture.[26] For Heynen, modernity can be seen as an inflection point, a moment in history characterised by the convergence of different phenomena. Technological developments engendered against the background of the new capitalist society present modernity as a site of

7 The meaning of *Erlebnis* in Benjamin's writing also describes the alienated subjectivity of the factory worker, who is a victim of the automatic movements of machinery. Ibid.

8 Anne Friedberg, *Window Shopping : Cinema and the Postmodern*, First paperback. ed. (Berkeley: University of California Press, 1994).

9 Massimo Cacciari, *Architecture and Nihilism : On the Philosophy of Modern Architecture*, Theoretical Perspectives in Architectural History and Criticism (New Haven ; London: Yale University Press, 1993).

10 Ibid., p. 4.

11 Ibid.

12 Ibid., p. 4.

13 Cacciari explains this in relation to the economic condition of the Metropolis: exchange-value is transformed into use-value by the '*Nervenleben* of the boulevard', while the intellect (industrial strategy) transforms use-value into exchange-value in an endless cycle of exchange. Ibid.

14 Ibid., p. 6.

15 Hilde Heynen, *Architecture and Modernity : A Critique* (Cambridge, Mass. ; London: MIT Press, 1999), p. 139.

16 Cacciari.

17 Heynen, p. 238.

18 Charles Rice, *The Emergence of the Interior : Architecture, Modernity, Domesticity* (London: Routledge, 2007).

19 Ibid.

20 Walter Benjamin and Michael William Jennings, *Walter Benjamin : Selected Writings* (Cambridge, Mass: Belknap Press of Harvard University Press, 2004), p. 734.

21 Walter Benjamin and Rolf Tiedemann, *The Arcades Project* (Cambridge, Mass: Belknap Press of Harvard University Press, 2002), p. 216.

22 Karina Van Herck, ""Only Where Comfort Ends, Does Humanity Begin": On the "Coldness" of Avant-Garde Architecture in the Weimar Period," in *Negotiating Domesticity : Spatial Productions of Gender in Modern Architecture*, ed. Hilde Heynen and Gulsum Baydar (London: Routledge, 2005).

23 Benjamin and Tiedemann, p. 216.

24 Rice.

25 Benjamin and Tiedemann, p. 19.

26 Hilde Heynen, *Architecture and Modernity : A Critique* (Cambridge, Mass. ; London: MIT, 2000).

conflict and tension, leading either to undeniable progress or a constant and unresolved struggle between economic and cultural traditions.[27] Within the tension between a positive interpretation of technological innovation and a more suspicious attitude critical of its consequences emerges the idea of a domestic space as a refuge and shelter. The domestic interior becomes the place within which to isolate and protect the individual from the increasing disruptions of technology and the consequences of this for the urban condition and the Metropolitan dweller.

Subsequently, these interiors slowly became a feminised space commanded by women that, according to professor Michael McKeon, was one of the main features of the ideology of domesticity: a paradox in which the ethical superiority of women is juxtaposed with their continuing socio-economic subordination to men. The domestic interior becomes the physical manifestation of a long and continuous process of internalisation and privatisation within the Metropolis,[28] the origins of which lie in the development of the Industrial Revolution. The division of labour at the end of the eighteenth century was one of the main factors affecting the relationship that had previously existed between the public and private: transforming it from a relationship of distinction to a relationship of separation.[29] This means, they are not just discernible categories, but also spatial organisation. For McKeon, it is precisely this distinction which gives rise to the emergence of a domestic ideology — understood as the firm division between the public and the private, and the specialisation produced by a sexual division of labour.[30] For him, 'public authority' moves from greater to lesser spheres: the political to the economic, the economic to the domestic, and the domestic to the female. Domesticity is thus part of a transition from a major structure (the Metropolis) to a minor one (the private space of the house).

Heynen thus contends that this ideology — which positions the female role and the male presence as opposites at home[31] — creates in modernity a series of ever changing social situations that are organised not only in terms of gender but also of space, work, and power. As she notes:

> It [domesticity] prescribes rather precise, albeit changing, norms regarding the essential requirements of family life, the needs of children, the proper ways of arranging food, cloth, and furniture, the care of body and health, the best ways to balance work, leisure, and family activities, the needs of cleanliness and hygiene. Domesticity can therefore be discussed in terms of legal arrangements, spatial settings, behavioral patterns, social effects, and power constellations.[32]

I this sense, for Heynen, it is precisely Adolf Loos' architecture what appears to challenge — if not to sometimes make explicit — the tensions between social and gendered relations of power through the optical hierarchies inscribed in their interiors. Through the articulation of the look, their framing interiors constantly constructs a subject in relation to other(s) subject. While rendering a 'mute' façade towards Metropolitan life — a type of mask, a screen splitting the outside from the inside — Loos' architecture simultaneously constructs a complex network of physical and visual relations through the way in which the space is contained, reaching its highest level of elaboration and complexity in Villa Müller (Prague, 1930) [fig.1.8].

However, Adolf Loos' architecture is not the only one that deals with the articulation of optical structures as medium or as a system of inscription upon which subjective relations are built. Indeed, it is possible to mention modern architecture more broadly, with its anti-domestic attitude (as the rationalisation of the space, its denunciation of decoration, its conception of the domestic as a machine in which to live), and its engagement with new systems of representations, what begin to propose alternatives forms of inhabitation. One that privilege optical control as a form of spatial and subjective organisation. This is the case of another house long overlooked in the history of modern architecture: Maison de Verre (Paris, 1932) [fig.1.9], designed by Pierre Chareau in collaboration with Bernard Bijvoët. An insertion of steel and glass, the house literally penetrates the quarters of an old building in rue Saint-Guillaume, supporting the weight of the structure above with steel columns. The interior is a free plan divided by a series of metallic elements that merge with its furniture, which rotates slides, spins, folds, and unfolds, creating a theatrical composition of the space where the position of a subject appears to be constantly assisted by different surfaces and objects. Maison de Verre is also a unique piece of architecture that combines the domestic space of the family with the working areas of a gynaecological clinic — owned by the father of the family, Mr. Dalsace. Despite differences in their materialities and in their architectonic language, both Villa Müller and Maison de Verre are experienced as visually removed from the outside, activating optical hierarchies and subjective relations through a series of viewing positions synchronised by their interior. These conditions are the subject of the next chapter.

1.8— Villa Müller. Adolf Loos (1930).

1.9 — Maison de Verre. Pierre Chareau (1932).

27 *Architecture and Modernity : A Critique*.

28 Michael McKeon, *The Secret History of Domesticity : Public, Private, and the Division of Knowledge*, John Hopkins paperback edition. ed. (Baltimore, Md.: Johns Hopkins University Press, 2007).

29 Ibid.

30 Ibid.

31 Heynen stresses, however, that this view of the domestic interior as the site for gender struggles mostly resides in the middle and upper classes, while in lower middle-class the coexistence of both male and female identities was not considered problematic. Hilde Heynen and Gulsum Baydar, *Negotiating Domesticity: Spatial Productions of Gender in Modern Architecture* (London: Routledge, 2005).

32 Ibid., p. 27.

II

2.1 Villa Müller

Many architects and critics have written about the architecture of Adolf Loos and its influence on modern architecture. Although most have produced their own interpretation of his work, it is possible to find areas of agreement. Loos's buildings are exposed to different interpretations, not just because they are subjected to specific historical concerns, but because his built works are accompanied by a significant body of essays; informing or misinterpreting his architecture. In her influential book *Privacy and Publicity: Modern Architecture as Mass Media*, Beatriz Colomina briefly explores this subject. Discussing the role played by the critic, Colomina explains how they inevitably fall victim of their own object of research, simultaneously producing a new object while being produced by it.[1] In this respect, she describes Loos as follows: "The Loos of the 1960's, the austere pioneer of modern movement, was replaced in the 1970's by another Loos, all sensuality, and in the 1980's by Loos the classicist."[2]

However, it is not my intention to conduct a thorough analysis of all the different interpretations that have shaped his work; instead, I use my previous discussion on the *screen* as a lens through which to explore various studies of Villa Müller and Pierre Chareau's Maison de Verre. More precisely, I examine what has been theorised at the intersection between visuality, the media, and domesticity. I believe this crossroads can be traced back to the writing of Adolf Loos who, while constructing a parallel between architecture and fashion, consistently developed a relationship between the domestic space and its condition as a mask. The mask, perform as a complex surface, negotiating the metropolitan condition of the market economy with an interior retreat, "a cluster of events"[3] where the subject dwells. However, once in its interior, this notion of the mask — at least in Villa Müller — gives place to a complex articulation of interior rooms. In Villa Müller, it is precisely the configuration of the *Raumplan* (the unfolding of the interior space) that makes the interior a series of perspectival constructions, regulating the position of a subject in relation to other subjects — or between viewer and image. This interior, operates as a mechanism, a framing device that defines a certain 'disposition'; a mode of seeing motivated by the programmatic distribution of the space, gender, and social relations.

2.1.1 The Urban Mask

In "The Principle of Cladding", Loos proposes a fundamental law that guides the way cladding must operate as a mask for the

1 Beatriz Colomina, *Privacy and Publicity : Modern Architecture as Mass Media* (Cambridge, Mass. ; London: MIT Press, 1994), p. 279.

2 Ibid.

3 Massimo Cacciari, *Architecture and Nihilism : On the Philosophy of Modern Architecture*, Theoretical Perspectives in Architectural History and Criticism (New Haven ; London: Yale University Press, 1993), p. 167.

material cladded. This is not to conceal the structures that are cladded, but to make manifest in a single surface the condition of both. Following the German architect Gottfried-Semper, Loos understood cladding to be a practice that precedes architecture. As he observes:

> Cladding is older even than structure. The reasons for cladding things are numerous. At times it is a protection against bad weather — oil-based paint for example, on wood iron or stone; at times there a hygienic reasons for it — as in the case of enameled tiles that cover the wall surfaces in the bathroom; at times it is the means to a specific effect — as in the colour painting of status, the tapestries on walls, the veneer on wood. The principle of cladding, which was first articulated by Semper, extends to nature as well. Man is covered with skin, the tree with bark.[4]

Loos replaced the mask of decoration with that of cladding. The white surfaces of his walls are mask; however, his notion of the mask was not restricted to the surface of the building; it was consistently developed alongside a series of writings on clothing and fashion. Ultimately, the function of the mask in architecture equals that of clothing. The exterior surface of a wall is a 'mask' (facing the metropolis, the outside world, the world of the social) that protects the interior (the world of inhabitation, the intimate, the self), in the same way that clothes must function as a mask to make identity possible.[5] As Loos states:

> We have become more refined, more subtle. Primitive men had to differentiate themselves by various colours, modern man needs his clothes as a mask. His individuality is so strong that it can no longer be expressed in terms of items of clothing. The lack of ornament is a sign of intellectual power. Modern man uses the ornament of past and foreign culture at his discretion.[6]

Referencing German architect Gottfried Semper, for Loos it is ornament that precedes architecture as material structure. Thus, ornament is not something to be added once the structure is completed, or gradually unfolded upon the domestic surfaces of the interior; rather, it is the very structure of the building. This is not a metaphorical statement, given that — following Semper's argument — it was precisely through the use of textile fabric that the domestic interior was produced in ancient times.

But these textiles — as decoration — need structural support and architecture provides this physical support, becoming a scaffolding, a prop. Textiles, as a form of ornament, are masks; a cover disguising the structural components of a building. Regarding this, in "The Principle of Cladding", Adolf Loos says:

> Stability and practicality demand materials which may not harmonise with the function of the building. Say the architect is to create a warm, cosy room. Carpets are warm and cosy, so he decides to spread one over the floor and hang up four to make the four walls. But you cannot build a house from carpets. Both floor carpets and wall hangings need a construction to keep them in place. Designing this construction is the architect's second task.[7]

Architecture as a practice of clothing should be discreet on the outside while countenancing the richness of the interior. This is something also touched upon by Benedetto Gravagnuolo, who – in 1982 – presented a comprehensive catalogue of Loos's built and unbuilt works in his book *Adolf Loos, Theory and Works.* For Gravagnuolo, Loos's exterior facades belong to civilisation, while its interior surface belongs to the individual.[8] The inside becomes a protective shell that wraps the dweller, physically and psychologically. Gravagnuolo suggests that Loos's interior becomes a constant search for a place in which to unfold the inhabitant's own subjectivity. Moreover, he refers to Loos's facades as 'silent' and 'defensive',[9] an essential condition of the surface in order to secure a certain interior autonomy from the exterior.

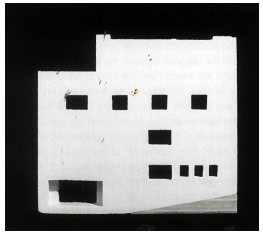
This reticence in communicating to the outside an interior condition is, according to Leslie Van Duzer and Kent Kleinman, "proper to a culture in which statements were convoluted into depictions"[10], hence the necessity to appear inconspicuous. As Loos says:

> To be dressed correctly! I feel as if I revealed in these words the secret that has surrounded fashion with words like 'beautiful', 'stylish', 'elegant', 'smart', and 'strong'. But this is not the point. Rather, it is a question of being dressed in such a way that one stands out the least.[11]

Van Duzer and Kleinman described the mask as not something that necessarily conceals, as it is often understood, but as a surface that in its very muteness communicates and transmits. The white mask operates instead as a screen, screening (out) a metropolitan condition from the interior. However, in so doing, it also constructs its own identity; it conceals as much as it reveals and hides while exhibiting. For Van Duzer and Kleinman, Loos's facades map the distinction between two socially constructed conditions, that of the metropolis and that of domesticity. However, this difference is profoundly marked by its surface. Referring to Villa Müller, the authors state that: "The disjuncture between the apertures of the façade and the disposition of the interior volumes is a measure of the crucial, albeit, uninhabitable space of the mask."[12] Villa Müller's mask is a mediating surface, a representation operating as deception. This illusion is manifest in a sectional model of the house that reveals the trickery of its manoeuvre. While the facade of the northeast wall [fig.2.1 and 2.2] displays the almost perfect alignment of its windows, within the house these barely correspond to the interior symmetry of the rooms. The mask is pure representation; a state also apparent in the southwest facade where its symmetrical composition masks the displacement of the main entrance in relation to the interior axis of the house [fig.2.3], which Loos resolves by the offset of the left-hand corner of the main facade.

But this mask that we can call a screen is, for some, not a surface that conceals its interior; rather, it is a surface that arises from its very internal configuration. Although a white surface, the facade is not constructed as a supplement once the interior is completed; it is constructed alongside it, in a form of interweaving between inside and outside. For Colomina, the function of the screen as a mediating surface between the outside and an inside becomes a system of difference, a language, with one side facing the exterior (the male mask) and the other the interior (the female mask) — "which is explicative".[13] Her analysis opens up a discussion on the limit established between one side and the other, arguing that this limit is situated precisely on the wall that defines it, an inhabitable wall, a 'split wall', a space that stands between the facade and the interior.

2.1



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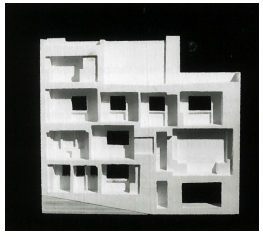

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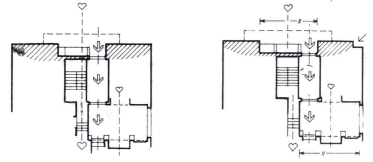

2.1 and 2.2 — Villa Müller sectional model; northwest wall, showing the slack of the mask. Collection Kleinman/Van Duzer. Villa Müller: A work of Adolf (1994).

2.3 — Floor plan drawing showing the offset of the left-hand corner to "correct" the asymmetry of the main facade. Drawing by Johan van de Beek in "Adolf Loos – Patterns of Town Houses.

4 Adolf Loos, "The Principle of Cladding," in *Spoken into the Void : Collected Essays, 1897-1900*, ed. Adolf Loos, Jane O. Newman, and John H. Smith (Cambridge, Mass.: Published for the Graham Foundation for Advanced Studies in the Fine Arts, Chicago, Ill., and the Institute for Architecture and Urban Studies, New York, N.Y., by MIT Press, 1982), p. 67.0

5 Colomina.

6 Adolf Loos et al., *On Architecture*, Studies in Austrian Literature, Culture, and Thought (Riverside, Calif.: Ariadne Press, 2002), p. 107.

7 Ibid., p. 42.

8 Benedetto Gravagnuolo, Aldo Rossi, and Roberto Schezen, *Adolf Loos : Theory and Works*, Idea Books Architectural Series (Milano ; Wien: Idea Books : Lōcker, 1982).

9 Ibid., p. 22.

10 Leslie Van Duzer, Adolf Loos, and Kent Kleinman, *Villa Müller : A Work of Adolf Loos* (New York, N.Y: Princeton Architectural Press, 1994), p. 45.

11 Loos, "Men's Fashion " p. 11.

12 Van Duzer, Loos, and Kleinman, p. 45.

13 "On Adolf Loos and Josef Hoffman: Architecture in the Age of Mechanical Reproduction " in *Raumplan Versus Plan Libre : Adolf Loos and Le Corbusier 1919-1930*, ed. Max Risselada (New York: Rizzoli, 1988).

2.4 — Interior of the Lady's boudoir (Photo: Ladislav Bezděk, 1988), *The Müller Villa in Prague*. Edited by City of Prague Museum.

2.5 — Interior of the Lady's boudoir (Photo: pavel Štecha and Radovan Boček), *The Müller Villa in Prague*. Edited by City of Prague Museum.

2.6 — The main hall lokked from the dinning room. (UPM archive, Prague). *The Müller Villa in Prague*. Edited by City of Prague Museum.

2.7 — Axonometric drawing of Villa Müller. Drawing from Max. Risselada. *Raumplan versus Plan Libre* (Delft University Press, 1987). Red line added by the author.

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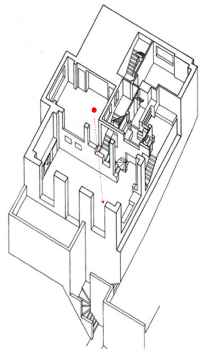


2.7

What lies on the other side of this screen (the facade), or rather beneath its surface, is a complex mechanism of optical dispositions. The subjects inside Loos's houses constantly move between an interior and an exterior. This does not refer to being inside or outside the house, but rather that the very conditions of the interiors are constantly mediating the position of the subject; screening between public and private situations, male and female categories, exhibitionistic and voyeuristic settings, and subject and object.

2.1.2 Loos' optical Interior

One of the main elements that trigger these conditions with regard to the space was described by Heinrich Kulka as the Raumplan,[14] which refers to the configuration of the interior rooms spanning out around a central space. The Raumplan was first experimented with by Loos in the Rufer House; however, it was not until later in his life that he defined its underlying principles in his writings. As he states, it is: "The solution of the plan in space…the free thinking in space…the arrangement of related spaces into a harmonic indivisible whole and into a spatially efficient composition."[15]

For Kenneth Frampton, the Raumplan is a system "organised about displacements,"[16] facilitating spatial movement. In this sense, Villa Müller can be experienced as a series of different claddings, as surfaces unfolding beyond the boundaries of a room, thus reinforcing a certain lack of spatial definition. While the room is in most cases ambiguous, connecting different spaces as if in constant transition, it also folds back to enclose a minor space — a piece of furniture, a corner — in which the body is positioned [fig. 2.4 and 2.5].[17] This ambiguity is alluded to by Loos when he observes:

> I do not design plans, facades, sections, I design space. Actually there is neither a ground floor, an upper floor or a basement, there are merely interconnected spaces, vestibules, terraces. Every room needs a specific height — the dining room a different one from the pantry — therefore the floors are on varying levels. After this, one must connect the spaces with one another so that the transition is unnoticeable and natural, but also the most practical.[18]

There seems to be a level of agreement among scholars that the Raumplan is not just an innovative spatial assembly of rooms, it is also a complex optical configuration of the interior. For example, Gravagnuolo describes the principle behind the Raumplan as the *Raumdurchdringung*: "the spatial interpenetration that brings linked spaces into close visual contact."[19] He views the interior as the place where psychological space intermingles with functionality. In *Adolf Loos: Pioneer of Modern Architecture*, Ludwig Munz and Gustav Kunstler describe Villa Müller as an intricate and, at times, apparently absurd configuration of different levels. Although they elaborate no further on this, they remark that it is precisely this convoluted sense of the space that demonstrates a "supreme mastery in the exploitation of perspective views."[20] The construction of perspective is always interior; it appears never to escape from the window but to halt at a corner, a furniture, a wall, a column, constantly shaping the field of view through its materiality, and through changing floor levels. These perspective views are analysed by Johan Van de Beck in "Adolf Loos – Patterns of Town Houses." In this work, Van de Beck discusses the Raumplan as a series of patterns that distinguish between: "living plan, space plan, and material plan."[21] Examining the 'living plan' of Villa Müller (the way the plan is organised), Van de Beck reflects on the displacement produced between the dining room's punctured wall (next to the staircase) and the two cipolin columns of the main hall. For Van de Beck, this produces an open corner[22] articulating a diagonally downward view from the dining room towards the main hall [fig. 2.6 and 2.7]. Moreover, he suggests that this line of sight also parallels the sloping topography of the site.

These interior views are not only orchestrated between rooms or different spaces, they are orchestrated between subjects. For Van Duzer and Kleinman, the Raumplan situates not one but two

14 Joseph Masheck, *Adolf Loos : The Art of Architecture* (Place of publication not identified: I.B.Tauris, 2013), p. 142.

15 Van Duzer, Loos, and Kleinman, p. 38.

16 Kenneth Frampton, *Modern Architecture : A Critical History*, World of Art (London: Thames & Hudson, 2007), p. 94.

17 Van Duzer, Loos, and Kleinman.

18 A Leslie Van Duzer, Adolf Loos, and Kent Kleinman, *Villa Müller : A Work of Adolf Loos* (New York, N.Y: Princeton Architectural Press, 1994), p. 143

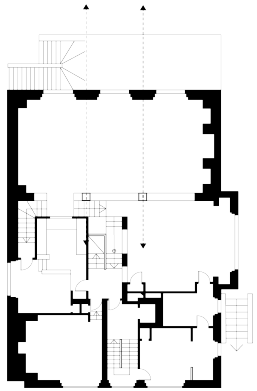
19 Benedetto Gravagnuolo and C. H. Evans, *Adolph Loos, Theory and Works*, Idea Books Architectural Series (New York: Rizzoli, 1982), p. 202.

20 Ludwig Munz and Gustave Kunster, *Adolf Loos : Pioneer of Modern Architecture* (New York: Praeger, 1966), p. 154.

21 Johan Van de Beek, "Adolf Loos - Patern of Town Houses," in *Raumplan Versus Plan Libre : Adolf Loos and Le Corbusier, 1919-1930*, ed. Max Risselada (New York: Rizzoli, 1988), p. 27.

22 Ibid., p. 40.

2.8



2.9

2.8 — Villa Müller main hall (Photo: pavel Štecha and Radovan Boček), *The Müller Villa in Prague*. Edited by City of Prague Museum.

2.9 — Floor plan of Villa Müller showing the sequence of frames between the façade and the inner cipolin wall. Sebastian Aedo (2019).

subjects.[23] These are the one who dwells, whose permanence is inscribed on the surfaces of the wall, which folds into furniture, corners, and props, positioning the body in space; and the roving one, who moves inside the interior as a performer of the former. As Colomina states, "Architecture is not simply a platform that accommodates the viewing subject. It is a viewing mechanism that produces the subject. It precedes and frames its occupant."[24]

For Colomina, in Loos's interiors these two subjects are constantly negotiating relations of power and control between the one who sees and the one who is seen, the one enclosed by the space and the other exposed by it. In Villa Müller, the optical arrangement is created by a series of punctured walls, surfaces, furniture, corners, and interiors that serve as framing devices, optically connecting and concealing the presence of a subject and the space. An example of such intentionality of framing can be found in the two main pillars dividing the main hall from the dining area [fig.2.8]. These pillars, clad in cipolin marble, are hollow[25] and their presence seems to be necessary only for an equivalent correspondence between the openings of the three main windows of the facade and the stepped internal cipolin wall, creating a sequence of frames between the facade and the interior walls [fig.2.9].

These interiors are, according to Colomina, the result of emergent media apparatuses circulating and penetrating the interior of the house. Domestic space changed as a result of its engagement with new media practices such as photography, advertisements, and publications, thereby transforming the way space and design were experienced and communicated. This is also discussed by Kenneth Frampton in the introduction to the book *Adolf Loos: Architecture 1903-1932*, which emphasises Loos' awareness of photography as a new "expressive medium."[26] For Frampton, Loos' understanding of the medium was not only epitomised in a series of photomontages of his own built work, it was also manifested in his ability to develop an illusionist space, challenging through mirrors, reflections, and framing devices the difference between image and experience.[27] The orchestration of vision inside the Villa Müller, for example, cannot be considered outside the practice of photography. Following Colomina's argument, photography is not simply a system of representation subordinated to the object represented, it is a practice that informs the creation of a space. Spaces transformed into images are not merely representations but the producers of a new space, the space of the media.

2.1.3 The Photographic Interior

Susan Sontag's book *On Photography* comprises a series of essays analysing the increasing presence and dissemination of the photographic image, and its consequences in mediation with a real world. In her essay "The Image-World", Sontag contends that photography as image is not a mere representation of its reference but an 'extension' of it, a means of obtaining control and redefining it. Sontag names this quality 'acquisition',[28] perhaps one of the most important forms of which is information. Photography has the capacity to redefine experience, unveiling entities and situations hitherto unseen. As Sontag explains:

> Photographs do more than redefine the stuff of ordinary experience (people, things, events, whatever we see — albeit differently, often inattentively — with natural vision) and add vast amounts of material that we never see at all. Reality as such is redefined — as an item for exhibition, as a record for scrutiny, as a target for surveillance.[29]

Photography mediates reality, which means not just redefining things, as Sontag states, but making unperceived events emerge on its surface; thus, photography is not a severe cut between representation and experience, but an essential surface negotiating both as a screen.

This negotiation is elaborated upon by Charles Rice in "Photography's Vail: Reading Gender and Loos Interiors." In this essay, Rice discusses the doubleness of the photographic practice in Loos' domestic spaces. This doubleness is represented as both the medium through which to gain access to its interior spatiality and the manifestation of this space as image. Rice articulates his argument in a discussion that describes the photographic practice of Loos' interiors not as mask but as 'masquerade'. Drawing on the psychoanalytic theory of Joan Riviere's "Womanliness as

23 Van Duzer, Loos, and Kleinman. Beatriz Colomina also suggests the presence of two different subjects in these spaces, one as spectator, the other as performer. She states: "The inhabitants of Loos's houses are both actors in and spectators of the family scene — involved in, yet detached from, their own space. Colomina, *Privacy and Publicity : Modern Architecture as Mass Media*, p. 244.

24 *Privacy and Publicity : Modern Architecture as Mass Media*, p. 250.

25 Julius Posener, *Adolf Loos : And the Reconstruction of Villa Muller = a Rekonstruckce Mullerovy Vily* (Beromunster, Swit: Architekt, 2002), p. 51.

26 Roberto Schezen, *Adolf Loos : Architecture 1903-1932*, ed. Kenneth Frampton, Adolf Loos, and Joseph Rosa (New York, N.Y.: New York, N.Y. : Monacelli Press, a division of Random House, 2009), p. 18.

27 Ibid.

28 Susan Sontag, *On Photography* (Harmondsworth: Penguin, 1979), p. 155.

29 Ibid., p. 156.

Masquerade," this concept refers to the essential doubleness of 'womanliness'. Written in 1921, Riviere's essay explains that a woman's identity is inherently defined by a doubleness. This operates as a defence mechanism, a veiling of femininity that dissimulates the possession of masculinity, which — in psychoanalytic terms — refers to the woman's possession of her father's penis. Masculinity develops through a woman's identification with the paternal figure, which is reflected in her cunning performance in everyday life, operating in a world produced and ruled by men. Thus, her male identification must be dissimulated, masked under a veil of femininity so that she is not found to possess a male identity in a world commanded by men. Hence, Riviere explains:

> Womanliness therefore could be assumed and worn as a mask, both to hide the possession of masculinity and to avert the reprisals expected if she was found to possess it — much as a thief will turn out his pockets and ask to be searched to prove that he has not the stolen goods. The reader may now ask how I define Womanliness or where I draw a line between genuine womanliness and the 'masquerade'. My suggestion is not, however, that there is any such difference; whether radical or superficial, they are the same thing.[30]

Therefore, for Rice, Loos' interior photographs operate like a woman's masquerade; that is, as a surface that mediates the space and its image, representation, and experience. Through its photographic representation, the domestic space acquires a double condition.[31] However, this double condition is also at play in the relationship stablished between exterior and interior. While the facade as a screen is conceived as a male mask, the photographic surface of its 'feminine' interiors unsettles both its gender and its blankness. Photography becomes another mask, another screen mediating between the viewer and the interior — as both perception and representation.

This intermingling between experience and image, or between inhabitation and perception, is constantly addressed by Loos, who refers to the inhabitant as the spectator, and the architect as the performer of effects. His approach to design seems to be commanded by 'feelings' and impressions, which he defines later as a complex optical structure, stating:

> But the artist, *the architect*, first senses the effect that he intends to realise and sees the room he wants to create in his mind's eye. He senses the effect that he wishes to exert upon the spectator: fear and horror if it is a dungeon, reverence if a church, respect for the power of the state if a government palace, piety if a tomb, homeyness if a residence.[32]

This perpetual authority of the space is achieved through both its experience and its image (representation). As Colomina writes in a footnote to *Privacy and Publicity*: "The perception of the space is produced by its representations; in this sense, built space has no more authority than do drawings, photographs, or descriptions."[33] In this case, it is important to note that, while for Rice photography operates as masquerade — the carrier of a double condition: experience and representation — for Colomina, photography is just one system of representation among others, offering valid but nonetheless different access to experience than built space.

However, my use of photography is different. Although, like Colomina, I consider photography and other mediums of representation to be equally valid forms of access to experience, I focus not only on the image, in its representation, but on those who are its viewers. This is because my view on the screen (in this case the photographic surface) necessarily implies a reflection upon a particular viewing condition. It is through this relationship that I 'enter' the interiors of the different case studies, thus creating a tension between the viewer of the image, and the viewer of the space. This differs from Colomina's approach in that although she analyses some of the photographic interiors of Adolf Loos, she does so either as if she were totally immersed in the image, experiencing the space itself outside the position of the camera, or as if she were totally detached from it, denying the position of the photographic camera as constituting her own place as viewer. As she explains:

> Looking at the photographs, it is easy to imagine oneself in these precise, static positions, usually indicated by the unoccupied furniture. The photographs suggest that it is intended that these spaces be comprehended by occupation, by using this furniture, by 'entering' the photograph, by inhabiting it [fig.2.10].[34]

30 Joan Riviere, "Womanliness as a Masquerade," *The International Journal of Psychoanalysis* 10 (1929), p. 306.

31 Charles Rice, "Photography's Vail: Reading Gender and Loos' Interiors," in *Negotiating Domesticity : Spatial Productions of Gender in Modern Architecture*, ed. Hilde Heynen and Gulsum Baydar (London ; New York: Routledge, 2005).

32 Loos, "The Principle of Cladding."

33 Colomina, *Privacy and Publicity : Modern Architecture as Mass Media*, p. 369.

34 Ibid., p. 234.

However, when she is not 'inhabiting' the photograph, she seems to be totally removed from it. She, as a viewer, is never caught by what she sees; she is not looking from the position of the camera; rather, she is detached from it. Colomina describes another photograph as follows:

> The only published photograph of a Loos domestic interior that includes a human figure is a view of the entrance to the drawing room of the Rufer house (Vienna, 1922). A male figure, barely visible, is about to cross the threshold through a peculiar opening in the wall. But it is precisely at this threshold, slightly off stage, that the actor/intruder is most vulnerable, for a small window in the living room looks down onto the back of his or her neck.[35]

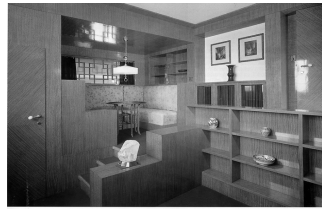
While describing a potential look from above that can surprise the male figure, Colomina seems to ignore the fact that the male figure is looking precisely at her, at the camera, and thus the potential look above seems to be irrelevant as he is already aware of our presence as spectators [fig. 2.11]. By contrast, my use of photography proposes to 'enters' the house through the media as viewer, as if metonymically occupying the place of the camera inside these interiors.

This also opens up the possibility of understanding the experience of inhabitation conversely: the occupier, the dweller predominantly acknowledging the space visually, as image, as its viewer. However, what I wish to stress is that my interest is not in the image itself, nor in its surface as representation, but rather in the modelling of subjectivity, in the ways a subject, a viewer (either of an image or the space) is disciplined through relations of optical power and control. In this sense, the representation of the domestic interior is only the visible surface of a complex intertwining of sexual differences, social effects, and cultural conventions. What exists beneath this conscious and visible surface is an invisible structure, an unconscious mechanism articulating and commanding intersubjective relations.

What follows is a series of optical and material excavations of Adolf Loos' Villa Müller as a first step in situating — through the use of the photographic archive — specific viewing situations between subjects. This 'excavation' or revealing is achieved through a redrawing of the floor plan as a series of visual fields projecting and shaping the interior configuration of the space. The visual fields emerge from a vantage point, metonymically taking the place of the photographic camera and thus representing the space as a monocular perspective projection, although regulated by the human visual field (120 degrees wide) [fig. 2.12]. As will be seen in a series of exploratory drawings, with their framing devices, lines of sight, concealing spaces, and shifting ground levels, Villa Müller produces different subjects through a system of optical differences.

35 Ibid., p. 237.

2.10



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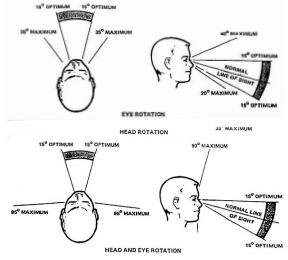


2.10 — Villa Müller ladies' boudoir. Beatriz Colomina refers to this photograph (among others) to describe the feeling of occupation triggered by them. *Privacy and Publicity : Modern Architecture as Mass Media.*

2.11 — Moller house interior. Colomina describes the subject's unawareness of a potential look from above. *Privacy and Publicity : Modern Architecture as Mass Media.*

2.12 — Human field of vision.

2.2 Villa Müller Optical Inscriptions

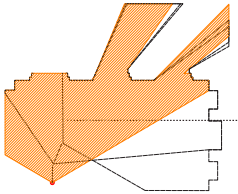
What follows as a design process is an attempt to 'excavate' the different vantage points and optical fields articulated inside Villa Müller. Through text, photographs and diagrams, the following drawings map specific optical conditions recognised in their interiors — constructing a sort of archaeology of visual perception. The way the visual field is mapped, is determined by the bifocal vision of 120°, the space shared by the right and the left eye. Some of the vantage points are multiplied further into the space — these optical conditions do not respond necessarily to a specific point in the space, but a range of positions that allows certain flexibility of movement. Although the optical field renders the space seen by a subject, this optical zone emerges as a photographic camera, a monocular vision, and not from the two points dictated by the bifocal human vision — an analysis that merge the human eye with the camera eye. Within Villa Müller, four groups, were identified according to their spatial position and optical relation with other subjects within the house. Thus, the first one — called 'exposure', displays the 'exposed' subject, the one that is constantly object of the other's view. This categorisation emerges from the idea of Loos' domestic interior as if interrupted by the intrusion of a theatre box. This understanding of Loos' interior, proposed by Beatriz Colomina, describes the space as the repository of domestic routines, social relations, and gender divisions organised visually as a spectacle. Moreover, according to Colomina, loos' interior deny any projection of the look outside the house, turning the eye back towards the interior. As Colomina says: "…the inhabitants become both actors in and spectators of family life — involved in, yet detached from their own space. The Classical distinctions between inside and outside, private and public, object and subject, are no longer valid."[1]

Thus, in the categories proposed here, the 'exposed' subject would be the 'victim' of another's look, an exhibitionist without necessarily the sexual connotation of the term. As we will see, the 'exposed' is someone arrested by the look of others, and object in the other's visual field. Counterpoising this position is the 'spectator', the one whose visual filed holds the interior as spectacle. This group is characterised by a position that remains partially hidden, privileged by a vantage point that allows to see but that makes difficult to be seen. This position is usually articulated by the presence of columns, walls and internal widows. The third category is the 'voyeur'. In Villa Müller, the definition of 'voyeur' is used as the male subject who invade and deliberately disrupt the privacy of a female space. Here the 'voyeur', is not so much the spying eye behind the door, but the eye reversing the previous spatial and gender organisation of the space. Hence, while an interior room like the boudoir is constructed as the female space of the house, the interruption of a male eye looking at its sitting area problematises the original intention of the project. The final category is the one called 'gender and social division'. This category, as its name describes it, makes visually manifest — at the level of intersubjective relations — the gender and social division of the interior. Through the visual encounter of two subject, this category displays how a lower social sort (a member of the service staff for instance), is not just spatially displaced, but subjectively defined by a member of the family. In its gender condition, this category works likewise. As we will see, 'gender and social division' confirm and follow the gender distribution foreseen in the architectural project.

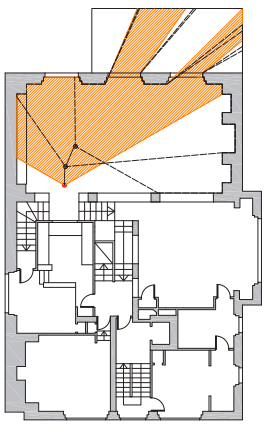
1 Beatriz Colomina, "Intimacy and Spectacle: The Interiors of Adolf Loos," *AA Files*, no. 20 (1990): p. 8.

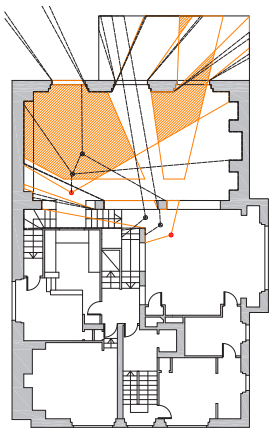
Exposed

A.1. The subject is displaced from the main axis and is detached from the main hall (loses his centrality). The terrace is revealed as an extension of the house toward the city. In this situation, the subject acquired a double condition: that of the actor, and spectator within a theatrical space[1]. He/she is able to see while simultaneously is seen from different vantage points. In the second diagram, the subject exposed is gazed at from the "open corner"[2] of the dining area (b) (an opening created by the displacement of the dining area in relation to the cipolin columns of the main hall). The view from this area is not just framed by the columns but slides into the main hall. Situated in a higher position, the view from the dining area it can reach anyone entering to the house. The exposed subject can also be visually caught from behind (the Boudoir window). The hatched area is the area where the visual fields cross.

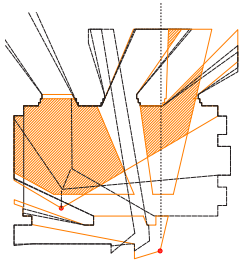


Photograph of main hall. The subject is exposed from different vantage points.(UPM archive, Prague). *The Müller Villa in Prague*. Edited by City of Prague Museum.





Photograph showing the "open corner". (UPM archive, Prague). *The Müller Villa in Prague*. Edited by City of Prague Museum.

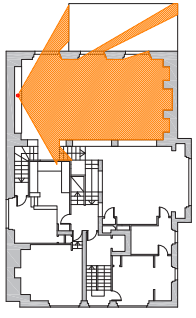


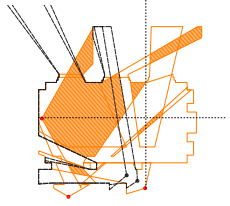
1 Beatriz Colomina, *Privacy and Publicity : Modern Architecture as Mass Media* (Cambridge, Mass. ; London: MIT Press, 1994).

2 "On Adolf Loos and Josef Hoffman: Architecture in the Age of Mechanical Reproduction " in *Raumplan Versus Plan Libre : Adolf Loos and Le Corbusier 1919-1930*, ed. Max Risselada (New York: Rizzoli, 1988).

A.2. The total length of the main hall is caught from the built-in furniture. The space is dominated from an immobile position, but the sight it is also still. This situation, leaves the subject in a double condition, while he can perceive the totality of the main hall, he cannot perceive the space above (the dining room) and this one is suggested by the voids between columns and by the reflection on the wooden ceiling. This position leaves the subject exposed from different angles: from the "open corner' of the dining room (a) and the boudoir (b)

Photograph showing the "open corner". (UPM archive, Prague).*The Müller Villa in Prague*. Edited by City of Prague Museum.



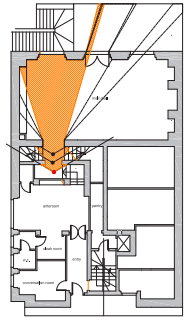


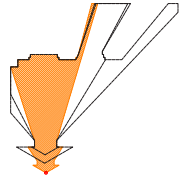
(b) (a)

View of the main hall from the built-in furniture. (photo: Věroslav Škrabánek). *The Müller Villa in Prague*. Edited by City of Prague Museum.

Spectator

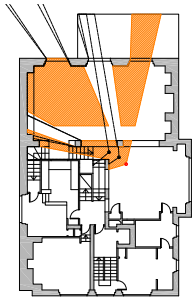
A.3. The threshold between the boudoir staircase and the Main hall, frames an interior view. This framing is the inflexion point of a subject that while is exposed to the main hall, he is also placed as a (centred) viewer of a space that opens beyond his visual field. His sight contains the main hall. The body is placed in one of the house's internal axis – he/she is looking towards the social space of the house, and the image framed by the walls

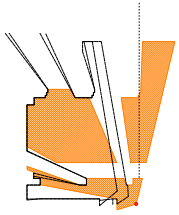




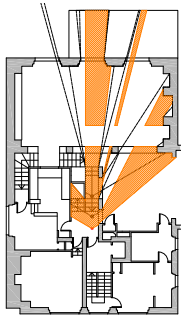
A.4. The dining room has an "open corner" that allows a visual connection that crosses the room and the main hall toward the exterior of the house. The subject looking through this corner is allowed to construct a downward sequence that leaves the main hall as a space in between the interior and the exterior. The subject is placed looking down as if in a theatre space where the stage is the main hall.

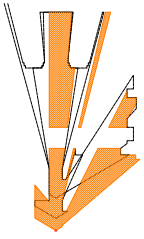
Photograph showing the "open corner". (UPM archive, Prague). *The Müller Villa in Prague*. Edited by City of Prague Museum.



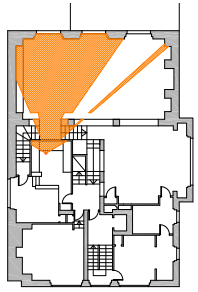


A.5. The subject is positioned at the center of the house (main axis) on the stair case, but its visual perception is incomplete, only open towards the main hall (front) and the dining area (right). This vision is partial, fragmented in between columns and the parapet. As the floor plan demonstrates, this position is at the centre of the house, but its visual field is decentered and fragmented, the subject seems to be displaced of a scene that he cannot completely arrest. The subject is captured within the staircase cage, partially overlooking the social spaces.

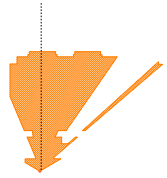




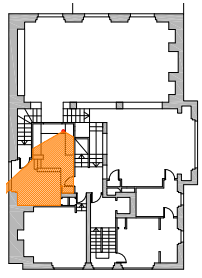
A.6. The window elements act as a control point, a panoptic device. The position of the window rarely works as a means to view but its presence constantly implies the possibility of visual invasion toward the main Hall. To see through this window, the subject needs to be standing, ignoring the room in a direct gaze toward the main hall. Any person entering the house can easily be seen[3]. The Boudoir acts as a surveillance container floating above the main hall.



The interior window of the Lady's boudoir. (photograph: Pavel Štecha and Radovan Boček). *The Müller Villa in Prague*. Edited by City of Prague Museum.



A.7. The body is looking inward into the boudoir, the "sacred place and a point of control."[4] The built-in furniture places the female body in a position that optically dominates the entire room. The peripheral furniture constructs a centripetal (inward) look. Just as the sitting area off the living room in Villa Müller, any intruder to the boudoir is immediately arrested by the female look of its occupant. Just as an actor entering the stage is caught by the look of the spectator, here any intruder is immediately seen by the female dweller.



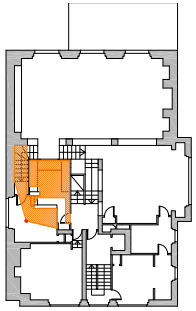
The interior of Lady's boudoir. (photograph: Albertina Loos Archive). *Villa Muller: A Work of Adolf Loos.* (New York, N.Y: Princeton Architectural Press, 1994).

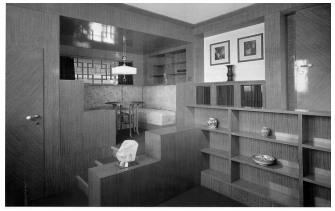
3 Ibid.

4 Ibid., p. 244.

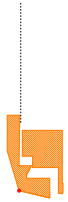
Voyeur

A.8. The subject who enters the private space of the Boudoir, is caught by the female gaze. The subject looks and his gaze is return. A voyeur caught in the act of looking by the female gaze. The privacy of the boudoir is transgressed, while the transgressor is exposed. The second diagram shows the female gaze.



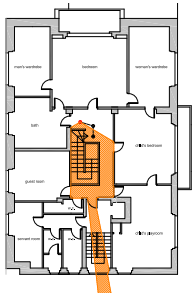


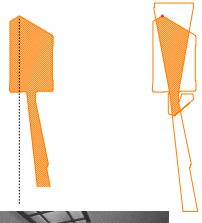
The Lady's boudoir. (photograph: Pavel Štecha and Radovan Boček).*The Müller Villa in Prague*. Edited by City of Prague Museum.



Gender and Social Division

A.9. The body is enclosed in the centrality of the house overlooking the main stair. When the front door is open, the service circulation is discovered. The space is duplicated and appears as a mirror image of the central space. If someone is using the stairs the subject position is also doubled. The service space is a parallel yet detached space of the house that creates a gender and social division. The second diagram shows the montage of the visual field of someone looking from the service stairs toward inside the family space of the house.

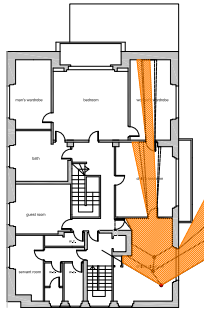


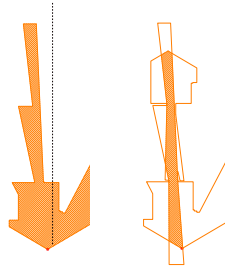


Central staircase with view of service stair. (photograph: Pavel Štecha). *Villa Müller: A Work of Adolf Loos*.(New York, N.Y.: Princeton Architectural Press, 1994).

A.10. From Mrs Müller's wardrobe, the line of sight can cross a series of rooms that create a sequence from the wardrobe to the child's playroom. This sequence is gendered: the woman's space is connected to the care of the family. The house, positions the woman in charge of the child's rooms and their spaces are an extension of the woman's own room.

View from the child's bedroom towards the child's playroom (photograph: Pavel Štecha and Radovan Boček).*The Müller Villa in Prague*. Edited by City of Prague Museum.





2.3 Maison de Verre

Maison de Verre, Paris (1928-1932), designed by Pierre Chareau in collaboration with Dutch architect Bernard Bijvoet and metal craftsman Louis Dalbet, is usually presented as a forgotten piece of architecture that escaped the discourses of Modernism.[1] The house appeared only to recover some relevance after being visited by Kenneth Frampton,[2] who wrote an influential essay in 1969 following his visit. In his essay, Frampton begins by asking whether Maison de Verre should be considered a building or rather a large piece of furniture.[3] Its unusual interior — an array of mechanical devices that slide, open/close, and spin to display and conceal different spaces — which merges its architectural elements with the furniture,[4] has served as the subject of multiple discussions. Among these considerations has been the way in which these devices are constantly negotiating the divisions of gender and class,[5] but also the limits between the private and the public, and the role played by the different mechanical devices in these divisions.[6] What is also unusual about the house is the insertion of the gynaecological consulting room of the owner, Dr Dalsace, in which all the medical equipment seems to merge with the architecture, extending an emphasis on bodily hygiene towards the entire house.[7]

Certainly, Maison de Verre is more than merely an example of interior design in the history of modern architecture.[8] However, its minor role within the modern movement is explained by

1 M. Jean Edwards and W. Geoff Gjertson, "La Maison De Verre: Negotiating a Modern Domesticity," *Journal of Interior Design* 34, no. 1 (2008).

2 Ibid.

3 Kenneth Frampton, "Maison De Verre," *Perspecta* 12 (1969).

4 Marc Vellay and Kenneth Frampton, *Pierre Chareau : Architect and Craftsman, 1883-1950* (London: Thames and Hudson, 1985).

5 Ibid., Edwards and Gjertson., and Christopher Wilson, "Looking at/in/from the Maison De Verre," in *Negotiating Domesticity : Spatial Productions of Gender in Modern Architecture*, ed. Hilde Heynen and Gulsum Baydar (London ; New York: Routledge, 2005).

6 Peter Wiederspahn proposes Maison de Verre as a mutable space, in which its mechanical devices are constantly negotiating between spaces of performance and spaces of function. Peter H. Wiederspahn, "Mutable Domestic Space: The Choreography of Modern Dwelling" (paper presented at the Oriental Occidental: Geography, Identity, Space: ACSA International Conference, 2001).

7 Sarah Wigglesworth, "Maison De Verre: Sections through an in-Vitro Conception," *The Journal of Architecture* 3, no. 3 (1998).

8 In Edwards and Gjertson's essay, a consistent literature review is presented in which Maison de Verre is mentioned as a work of interior design rather than as a piece of architecture.

Kenneth Frampton in his final essay about the house in 1984,[9] in which he criticises the house for its redundancy in its mechanical devices and form. The house, for Frampton, however, seems to perfectly reconcile two types of furniture: those pieces specifically designed by Chareau for the house and those pieces acquired by his clients. Furthermore, the idea of the house as a large piece of furniture seems to find its explanation in the construction system employed, which was carried out using a 'montage' technique — in which drawing and sketches made on site were directly executed by the metalworker, Louis Dalbet.[10] Maison de Verre was a large translucent glass shell enclosing a void that was slowly filled with objects that interacted with the furniture and architectonic elements [fig. 2.13 and 2.14]. Thus doors, stairs, bookshelves, cupboards, and curtain walls outline the interior spaces defining the different rooms, which, in turn, slide, spin, fold, pivot, and so forth, thereby connecting, expanding, and concealing different spaces [fig. 2.15, 2.16, and 2.17].

The screenness of Maison de Verre, relies precisely on such devices, and nowhere is it more explicit than in the large glass façade. This particular screen made by glass lenses[11], is not a transparent surface but a pixelated and translucent shell homogenising the external light inside the house. Light seems to be the main obstacle faced by Chareau, who envisioned the free plan not as an attempt to comply with the modernist principles of the time, but rather as response to its dim interior. Dr Dalsace describes this condition as being so dark that "the employees of the old lady, who would live to be a hundred, were obliged to work throughout the day by artificial light."[12] In Maison de Verre, it is its lighting condition what directs the design of the interior. Thus, light must penetrate deeper into the house to illuminates the domestic quarters, the social meetings around the grand hall, and the clinical space. For this, the free plan is reinforced by the large glass block screens, interrupted only by a few transparent glass windows [fig 2.18]. The whole interior is bathed in a homogeneous penetration of light making more literal Adolf Loos' claim that windows are not intended to be looked through, but rather to allow the penetration of light into the interior.[13] Throughout most of its façade, Maison de Verre denies an exterior and this one — in opposition to Le Corbusier's interiors — is used only as a source of light [fig. 2.19].

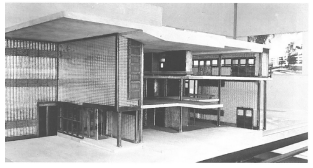
9 Kenneth Frampton, "Pierre Chareau. An Eclectic Architect," in *Pierre Chareau : Architect and Craftsman, 1883-1950*, ed. Marc Vellay and Kenneth Frampton (London: Thames and Hudson, 1985).

10 He also mentions a few perspectival drawings that remain as part of the original document used in its construction, and remarks — based on an interview between Robert Vickery and Bernard Bijvoët — upon the idea that no working drawings were prepared for the house.

11 Wilson.

12 Quoted in Frampton, "Maison De Verre," p. 79.

13 Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge, Mass: The MIT Press, 1998); *Privacy and Publicity : Modern Architecture as Mass Media* (Cambridge, Mass. ; London: MIT Press, 1994).



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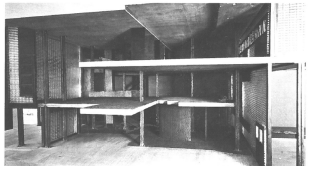

2.14

2..13 and 2.14 — Sectional model of Maison de Verre showing the glass shell enclosing the void.

2.15

2.16

2.17

2.18

2.15 — Pivoting wall between the waiting room of the clinic and the service area in Maison de Verre.

2.16 — Folding screens enclosing the clinic' waiting room.

2.17 — Glass and perforated steel screen dividing the ground floor and the first floor of the house.

2.18 — Transparent widows interrupting the translucent glass lenses.

The particularity of its glass, is perhaps one of the main attributes of Maison de Verre. In her monograph *Part-Architecture: The Maison de Verre, Duchamp Domesticity and Desire in 1930s Paris,* Emma Cheatle analyses the Maison de Verre in a dialogue with Marcel Duchamp's work *The Large Glass*. Her analysis attempts to instigate new interpretations of both works. In the case of Maison de Verre, Cheatle, proposes an alternative reading of the house, outside the conventional discourse established by the history and theory of architecture.[14] Her original approach understands the house not as an isolated structure but "as a piece of female social architectural history",[15] that studies the house from a feminist point of view, generating new discussions in relation to sexuality, womanhood, and domesticity — aspects already in operation in Duchamp's work. Informed by Lacan's L schema[16] and its reading by Rosalind Krauss in the *Optical Unconscious,* Cheatle proposes the part-architecture schema as an alternative method to inform her reading of the house. The part-architecture schema operates as a mechanism that situates her study in relation to the Maison de Verre and the Large Glass, her imaginary writing of past situations and the historical context in which they took place. Thus, Cheatle uses the elements of glass, dust, and air as part-objects which are a "different framing of the same subject"[17] to construct new material that informs the history of the house.

In the chapter 'Glass', for example, Cheatle maps the history of the material through its performance in the Large Glass and Maison de Verre. Here she situates glass as a material with physical and visual properties, explored in the history of architecture and medicine, but perhaps more importantly, as a material that mediates hidden histories and narratives. Through her particular reading of the material, the glass appears as the active agent constructing moments of optical control, suppression, reflection, privacy, publicity, and gender divisions. Following Colomina's analysis of modern architecture, in Cheatle's writing, "architecture is not simply a platform that accommodate a viewing subject. It is a viewing mechanism that produces the subject."[18] Cheatle's description seems reminiscent of Paul Scheerbart's novels, for whom glass is always used as a stage setting scenario. Like Cheatle's glass narrative, in Scheerbart's novels the material always manifests through his characters' experiences.[19]

However, Cheatle is not the first to compare Chareau's Maison de Verre with Duchamp's Large Glass. Among all the technical descriptions in "Pierre Chareau: An Eclectic Architect", Kenneth Frampton proposes a similar approach. Although he reminds us that his comparison does not attempt to suggest any direct influence of one work over the other, there are remarkable similarities in addition to the evident use of glass. Frampton reads the Maison de Verre floor plan as a Bachelor Machine,[20] a clear division of genders that defines the ground floor as the 'bachelor' space — Dr Dalsace's realm — and the second floor with all its private rooms as the Bride's domain, who is in custody of the family space. This gender division finds its point of negotiation on the first floor, where Dr Dalsace's studio and Mrs Dalsace's boudoir coexist, but also as the level upon which the public and private spaces converge [fig. 2.20].[21]

The point made by Frampton concerns the way in which the house's mechanical devices are constantly reinforcing these limits. Thus, a retractable staircase communicates the space of the boudoir with the corresponding female space of the second floor [fig. 2.21, 2.22], while the staircase of the study room winds around a telephone cabin down to the clinic area [fig. 2.23]. This relationship between mechanical objects, space, and gender pervades other spaces of the house, for example, the main bathroom where a series of mechanical doors divide the room into female and male zones [fig. 2.24 and 2.25].

This insinuation of doubleness, in which the space of the clinic and the house constantly mirror each other, is expanded by Sarah Wigglesworth, who describes Dr Dalsace's examination rooms as the place where different domestic objects metamorphosise into

14 Emma Cheatle, *Part-Architecture : The Maison De Verre, Duchamp, Domesticity and Desire in 1930s Paris* (New York: Routledge, 2016).

15 Ibid.

16 Lacan's diagram of the L schema is part of his psychoanalytic theory which situates the subject as essentially displaced and fragmented by a variety of parts that emerge in his constitution as subject. Thus, the mirror stage as well as the subject's introduction into the symbolic realm split the subject into an unconscious, an ego, the big Other (society), and the *objet petit a* which are constantly informing the subject's unconscious.

17 Cheatle, p. 54.

18 Colomina, *Privacy and Publicity: Modern Architecture as Mass Media*; *Privacy and Publicity : Modern Architecture as Mass Media*.

19 Rosemarie Haag Bletter, "Paul Scheerbart's Architectural Fantasies," *Journal of the Society of Architectural Historians* 34, no. 2 (1975).

20 Vellay and Frampton.

21 In Frampton's analysis, he also divided the house plan, leaving the front part as the social and masculine space of the house in contrast to the rear female space of the family. However, in his description it is difficult to avoid a gender bias that describes the kitchen as the female space and the main hall, which contains the floor to top bookshelf, as the masculine space. Ibid.

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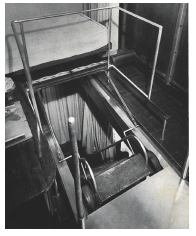

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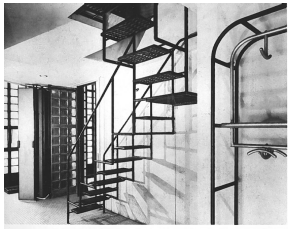


2.23

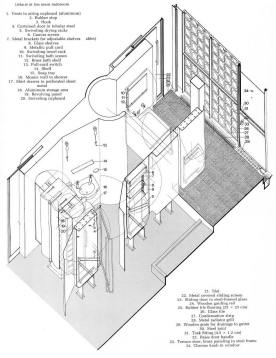
2.19 — View from the main hall of the translucent glass lenses filtering the light from outside.

2.20 — View from the main hall looking at Dr. Dalsace's studio.

2.21 — Retractable staircase communicating the space of the boudoir with the main bedroom. Stair folded.

2.22 — Retractable staircase communicating the space of the boudoir with the main bedroom. Stair unfolded.

2.23 — Study room staircase winding around a telephone cabin on the floor above



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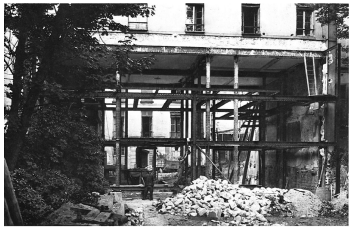


2.27

2.24 — Axonometric drawing showing the series of mechanical doors negotiating the privacy of the room. Drawing by Kenneth. Frampton, Robert, Vickery, and Michael Carapetian.

2.25 — Free standing duraluminum storage unit at the bathroom shown open.

2.26 — screened toilet unit in one of the bedrooms .

2.27 — void created by Chareau within the existing building in order to insert the new structure.

clinical ones. As she notes: "the bed becomes a couch, the side table becomes a trolley in stainless steel, and the table lamp becomes a light and speculum."[22] This situation is inverted on the upper floors where the clinic seems to permeate most of the domestic objects. In the bathroom, for example, movable screens render the human body into a fragmented silhouette, an object for inspection [fig. 2.26]. In addition, the different appliances such as the shower, bidet, and basin can be manipulated and moved according to the user's will, just as Dr Dalsace manipulates his medical instruments for the inspection of the female body.

Although mechanisation is an importan aspect of the house, it would be interesting to see the purpose of it in the configuration of the domestic space. For Siegfried Giedion, for example, mechanisation had a common purpose, whether in the factory or in the household, which was to improve organisation and decrease wasted labour.[23] Giedion suggests that the mechanisation of domestic labour seemed to be reinforced by earlier preoccupations, which emerged at the end of the eighteenth century in the United States, that encouraged the distribution of domestic labour between all members of a family. This had the purpose of freeing the domestic space from the work of servants who occupied and invaded the private space of the house.

This kind of ideal that underpinned the mechanisation of households could not be more removed from the Maison de Verre, where a three-level service wing, accommodating the kitchen and the maids' quarters, extends out from the main volume.[24]

Undoubtedly, in the Maison de Verre, the principles that support the mechanisation of its different devices are not oriented towards a servantless interior.[25] Moreover, in Gideon's book, the purpose of mechanisation is mainly considered to be a cleaning aid for the house, the efficiency of bodily movement,[26] and time saving rather than as a form of regulating and distributing the space.[27] In one of the first articles written about the house (1933), Julien Lepage actually remarks that there is nothing mechanical about the house and that: "None of the equipment is menacing. It is all treated with such delicacy and its function is so well revealed that all these pieces are more like organs than instruments."[28] This description of the house's pieces as organs seems similar to the one made by Le Corbusier, who described the windows as organs[29] and adopts a conception of the house as a large metallic and glassed body.

This intimation is further developed by Wigglesworth, who proposed Pierre Chareau's work to be that of an architectural gynaecologist. For Wigglesworth, Maison de Verre is literally, "an insertion into the existing tissue of the city whose fabric is excised and propped open to allow the designer's new erection to be inserted into the cavity."[30] Her description alludes to the void created by Chareau within the existing building in order to insert the new structure (his design), given that an elderly woman occupied the top floor refused to abandon her apartment [fig. 2.27]. Wigglesworth's analogy portrays the architect as gynaecologist and the house as the reproduction of another body through an in-vitro conception, a conception in glass within which both economic production and sexual (family) reproduction take place.

The house as a body in the above analogy is not gender-neutral but rather a female body. For Wigglesworth, the darkness of the interior body is akin to the darkness found in the void carved out of the existing building, and just as Chareau designed screens of light to illuminates its interior, Dr Dalsace uses his optical instruments to illuminate and penetrate the female body. The analogy that renders the ill body of the female patient as a space that must be illuminated to be cured is underpinned by her treatment as an object by both the house and the medical instruments and procedures. Wigglesworth describes the body as being constantly fragmented and mirrored by the mirrors, windows, doors, and screens of the house, but also by the veiling of her identity while being inspected by the doctor and manipulated by his instruments. However, what may be a new interpretation is the idea of medical technologies mediating their representations. Thus, for Beatriz Colomina, during the Renaissance, just as drawings of dissected

22 Wigglesworth, p. 274.

23 S. Giedion, *Mechanization Takes Command : A Contribution to Anonymous History* (New York: Oxford University Press, 1948).

24 Frampton, "Maison De Verre."

25 Giedion.

26 In this regard, an interesting example is the kitchen developed by Grete Schütte-Lihotzky known as the Frankfurt Kitchen and recognised for — at the time — its efficient use of space, hygiene and workflow. Schütte-Lihotzky not only used different materials but also conducted time-motion studies and interviews with housewives to produce her design. See: "The Frankfurt Kitchen," website *Counter space: design + the modern kitchen* 2019.

27 Kenneth Frampton describes the 'transformable' elements of the house as slightly affecting the character of the space, in contrast with a few other elements such as the pivoting door and some of the sliding panels that radically change the space. Frampton, "Maison De Verre."

28 Quoted from ibid, p. 81

29 Colomina, *Privacy and Publicity : Modern Architecture as Mass Media*.

30 Wigglesworth, p. 267.

bodies were produced for medical research, early sliding sections of buildings began to be produced to understand the architectural interiors. She takes this analysis further with the invention of the X-ray, which proposed an elaboration of a sort of X-ray architecture, embodied in some of the glass buildings by Mies van der Rohe, Le Corbusier, and Walter Gropius — in which the skins of the buildings are produced by huge glassed walls revealing internal organs of steel and concrete.

However, this particular layout of the house that seems to be divided into male and female spaces is also contested or reversed by the same mechanical devices that allow for the expansion of the optical field within it. In this regard, Christopher Wilson organises the house through two different visual constructions: the 'domestic glance' and the 'medical gaze.'[31] Fastening onto Bryson's definition of the gaze and Foucault's clinical gaze, Wilson reads the entire ground floor of the house as Dr Dalsace's optical realm, in which he performs a 'medical gaze', understood as a gaze that does not find any compensation, a gaze that penetrates the patient's physicality to find a hidden truth, "the rigorous examination of a subject."[32] While Wilson seems to forget that this gaze is also produced in relation with a series of technical and optical instruments, his description points towards a gaze that is not only limited to the consultation room or the examination area but permeates (or extends) throughout the entire ground floor of the house.

The doctor is not only in possession of a dissecting gaze, but also has constant authority over the patient's movements. Even though I do not agree with this last observation as something exclusively caused by the house's architecture (in any consulting room the doctor is in command of his patient's movements), what is interesting is Wilson's understanding of the house as a spectacle. This is organised by two different modes of looking that intersect and override any previous horizontal and programmatic organisation. There is the female patient looked at by the medical instruments while being screened by the architecture; and a 'domestic glance', which is the intersection between looking and being looked at, within which different pieces of furniture and screens are constantly mediating the encounter between the two. Furthermore, this domestic glance ultimately finds its way onto the ground floor, nullifying the independence of those two realms (the domestic and the clinical), intersecting and contesting Dr Dalsace's optical domain [fig. 2.28].

Following the previous study of Villa Müller, the next section is a series of optical encounters recognised between subjects and materials inside Maison de Verre. Using documented photographs, text and film, I mapped specific vantage points that expose optically of the house. Moreover, the structure of vision is articulated precisely by the spinning furniture, mechanic screens, pivoting surfaces, and so on. Through these drawings, an optical excision of the interior is produced, one that analyses its visual assemblage which is of course determined by different material and programmatic concerns. The categories are the same determined in Villa Müller. Thus, these ones are: exposed, spectator, gender and social division, and voyeur.

2.28

2.28 — View towards Mrs. Dalsace's 'spying corner'.

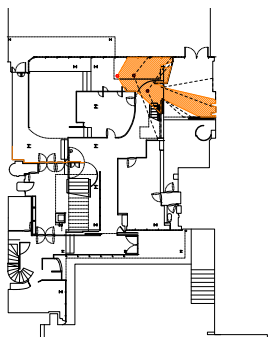
31 Wilson.

32 Ibid., p. 235.

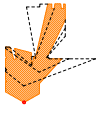
2.4 Maison de Verre Optical Inscriptions

Exposed

B.1. The foyer between waiting area and doctor's consulting room is the last section of the house before entering the doctor's office. The patient's body is located at the edge of the house, in a shallow space at the intersection of vertical and horizontal divisions.[1] She is exposed to the small balcony protruding from Mrs. Dalsace's Boudoir, who can survey from above any person entering Dr. Dalsace's consulting room. The patient is crossing an exhibitionistic space

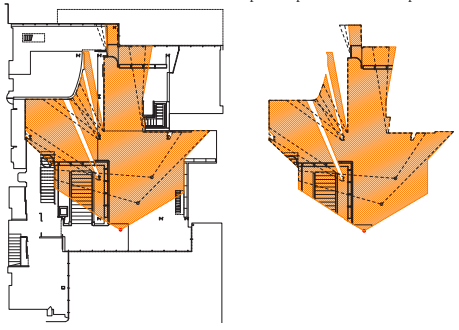


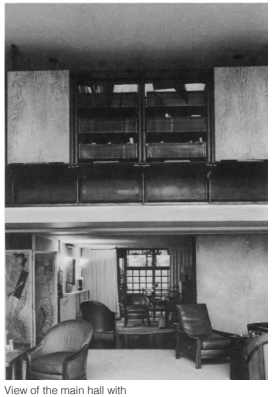
Foyer between room and doctor's consulting room (photograph: Michael Carapetian). Kenneth Frampton, "Maison De Verre," *Perspecta* 12 (1969).



1 Kenneth Frampton, "Maison De Verre," *Perspecta* 12 (1969).

B.2. Once on the first floor, the domestic space, the subject can see the totality of the social area, When Dr. Dalsace's studio-sliding door is open, the dimension of the entire floor is achieved by a glance, merging his working space with the social life of the house. When the sliding-door is closed, the studio remains isolated from the family scene and merges with the life of the clinic. While the first floors, as a semi-public space, is totally open, the second floor remains veiled by the bookshelf and this only allows view from above to below. The pixelated screen made of glass blocks illuminate the interior as a theatre stage looked at from the mezzanine level. Thus the main hall is a space of performance, of exposure.

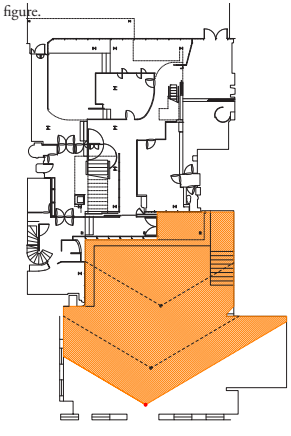




View of the main hall with Dr. Dalsace's sliding door open (photograph: Michael Carapetian). Kenneth Frampton, "Maison De Verre," *Perspecta* 12 (1969).

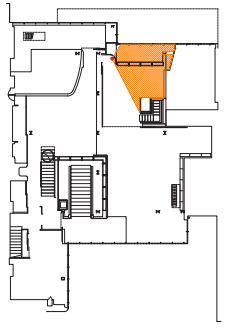
Spectator

B.3. At the forecourt, the body faces the main facade. Translucent glass lenses create a pixelated screen that hides and exposes. This screen is not transparent but mostly opaque, where only figures, silhouettes and movements can be detected. The image of the body is fetishized: upon the glass surface, which operates as if a cinema screen towards the forecourt, revealing the presence of a subject, while concealing his or her figure.



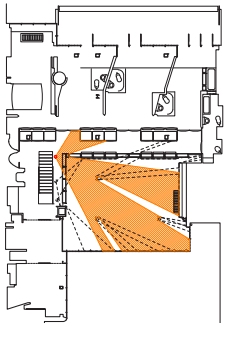
Forecourt of Maiosn de Verre, facing the main glass screen. (photograph: Emma Cheatle, 2009). *Part-Architecture: The Maison de Verre, Duchamp, Domesticity and Desire in 1930s Paris.*(New York: Routledge, 2016).

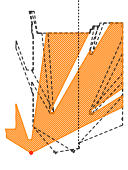
B.4. "The spying corner": The body detached from the private family space and look toward the consultation room's. The privacy of the patient is transgressed and is totally visible from above. Mrs. Dalsace performs a surveillance look over the exposed body of the patient



Mrs Dalsace's "spying corner" (photograph: Marc Vellay and Kenneth Frampton). *Pierre Chareau: Architect and Craftman 1883-1950* (New York: Rizzoli, 1984).

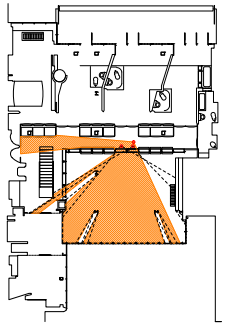
B.5. From the mezzanine level, the subject can see the family scene. As in a theatre box, viewing subject is a spectator of the family and social life. He can also be seen, but the lighting condition and his privileged position above the main hall looking downwards, situates him/her in a dominant position.



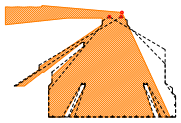


Looking down from the mezzanine (photograph: Michael Carapetian). Kenneth Frampton, "Maison De Verre," *Perspecta* 12 (1969).

B.6. The surveillance situation where the body can see the corridor and part of the hall, while he/she can remain unnoticed from the main hall hidden behind the bookshelf.

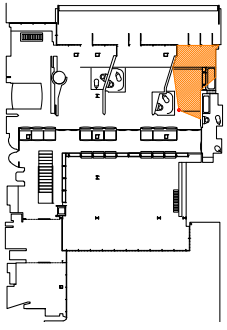


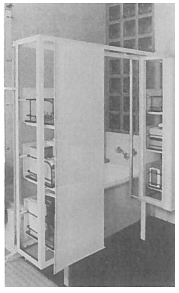
Hidden behind the bookshelf, Looking down from the mezzanine (image from the film *La Maison de Verre*. Richard Copans, Stan Neumann).



Voyeur

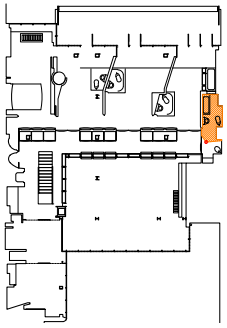
B.7. The daughter's shower bath is screened by a perforated metal door with a bookshelf. When the doors are closed is possible to see her silhouette behind, screened by the metallic mesh and the books on the bookshelves. The body entering the room is a spectator and a voyeur of the female privacy and her sexuality

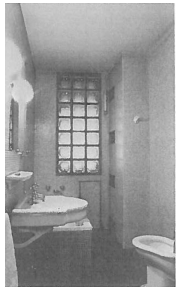




Perforated metal door with a bookshellf (photograph: Michael Carapetian). Kenneth Frampton, "Maison De Verre," *Perspecta* 12 (1969).

B.8 But not just from inside the room is possible to witness the female body. This is also possible from the guest room. Part of the bath walls are, like the façade, glass lenses. The light coming-in from the garden's façade, illuminates the glass lenses as a big screen. The body in the shower appears backlit and projected into this screen. From the guest bathroom, the body is framed and her silhouette is exhibited

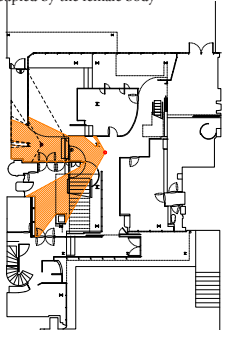


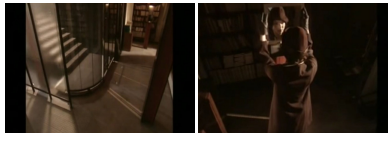


Interior of the guest bathroom (photograph: Michael Carapetian). Kenneth Frampton, "Maison De Verre," *Perspecta* 12 (1969).

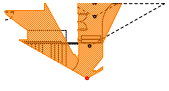
Social and Gender Division

B.9. Reaching the clinic space, the body turns and sees the screened stair leading to the house and, behind it, the service area. For the first time the subject is aware of the division public-private, clinic-house, and servants-inhabitants. Forward into the house, an adjustable mirror is located at the height of the patient's face before entering the waiting area. The sliding mechanism of a curtain wall and a change in the ground level suggest the gender division of the space, as a space occupied by the female body

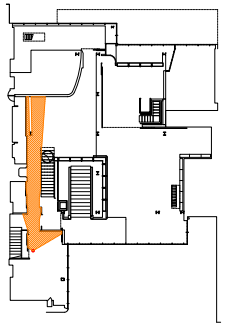




Reaching the clinic space, and facing the adjustable mirror (image from the film *La Maison de Verre*. Richard Copans, Stan Neumann).



B.10. In the Corridor connecting the service wing with the dining room, the body is replaced by a mechanical device. The mechanism is mechanical tray transporting the food from the kitchen to the dining table, thus, a mechanical substitute of the body but also of the servants. There presence is repressed. The visual field implies a gender and social division inside the house.

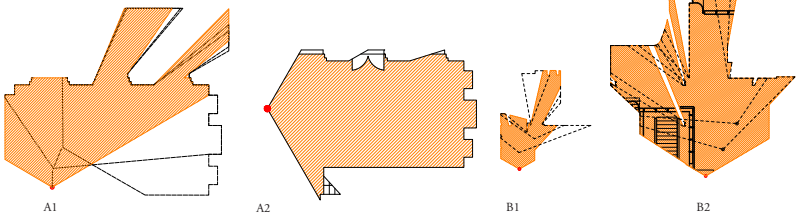


Passageway between kitchen and dinning room (photograph: Michael Carapetian). Kenneth Frampton, "Maison De Verre," *Perspecta* 12 (1969).

Categories

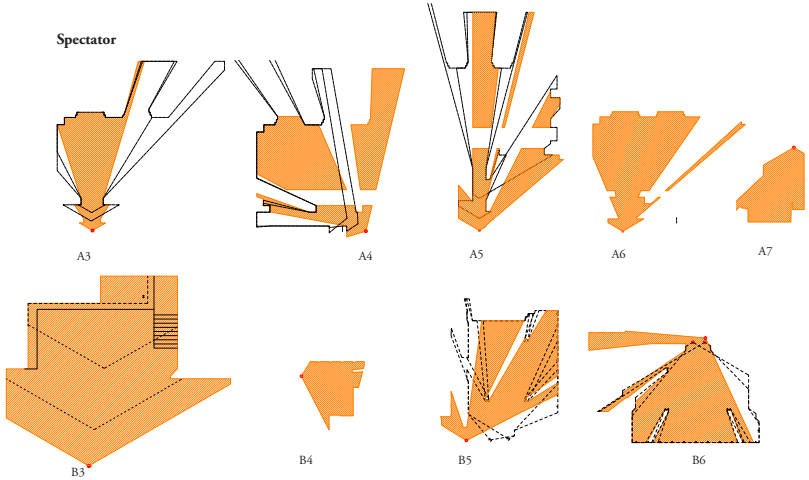
The different vantage points recognised inside both, Villa Müller (A) and Maison de Vetrre (B), are finally classified as follow:

Exposed



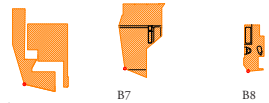
A1 A2 B1 B2

Spectator



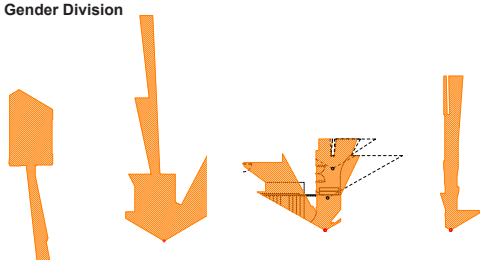
A3 A4 A5 A6 A7 B3 B4 B5 B6

Voyeur



A8 B7 B8

Social and Gender Division



A9 A10 B9 B10

2.5 The Hybrid: Fragments and Superimpositions of the Visual Field

Following the previous process of optical excavation, where specific optical hierarchies were recognised in both Villa Müller and Maison de Verre, the next stage entails their reorganisation into a new optical structure. The aim is to explore how the different optical positions begin to interact in a new configuration, destabilising their previous spatial and subjective positions. The visual fields are sorted into four groups: exhibitionist, spectators, voyeurs, and social and gender divisions. The new configuration of these optical fields is carried out by a process of montage in which each is grafted on the other.

According to the dictionary, a hybrid is defined as "anything derived from heterogeneous sources or composed of different or incongruous elements."[1] The visual fields identified in the original houses are treated as images, and clipped cuts of their interiors are manipulated, overlapped, rotated, or inverted. Each operation leads to a form of montage in which each vantage point is freed from the programmatic restrictions of its original interior and organised only in terms of its optical consequences, resulting in a diagram of optical positioning.

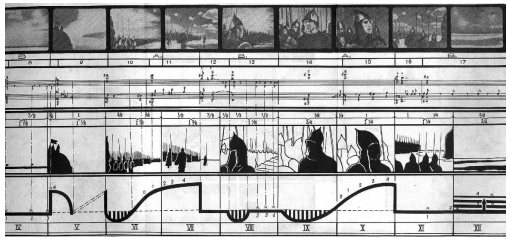
The term 'montage' is derived from the cinematic technique developed and theorised by the Soviet filmmaker Sergei Eisenstein. Montage is defined as a process of fragmentation[2]; where the image, captured by the camera, is cut out, sliced and extracted from its context — "a piece of reality is sliced off with the camera lens."[3] — Eisenstein says. Each fragment contains information on its own codes or parameters which the film theorist Jacques Aumont relates to the idea of *verticality.* Taking its name from Eisenstein's essay: "Vertical Montage" (concerned in part with the analysis of the film sequence of *Alexander Nevsky*), Aumont defines *verticality* as the process by which a horizontal and continuous unfolding of the image on the screen can be broken down into pieces, recognising and classifying the multiple elements operating in each fragment [fig. 2.29]. Thus, something that appears indivisible on the cinema screen is dissected as a series of codes, information, and varied elements that together compose the image (luminosity, shapers of focus, contrast, camera angle, length, and sound).[4] Therefore, the fragment, an image charged with information and parameters, is placed alongside other images in a horizontal process referred to as a montage — creating new relationships between each fragment and

1 Catherine Soanes et al., *Oxford Dictionary of English*, Second edition, revised / ed. (Oxford: Oxford University Press, 2005).

2 Sergei Eisenstein and Jay Leyda, *Film Form : Essays in Film Theory*, International Theatre and Cinema (London: Dennis Dobson, 1960).

3 Ibid.

4 Jacques. Aumont, *Montage Eisenstein* (London, Bloomington: BFI Pub. Indiana University Press, 1987)., p. 31.



2.29 — Analysis of the film sequence of *Alexander Nevsky* (1938).

those that precede and follow it.[5] In a montage, there is persistent tension between the parameters of the image and the information it contains, and the image formed in its relation to others. As Eisenstein says, "The dominating indications of two shots side by side produces one or another conflicting interrelation, resulting in one or another expressive effect."[6]

In the hybrid, montage is understood as the superimposition of distinct optical fields. Even though they do not unfold horizontally, it is nonetheless a process that follows a certain sequence. Montage, in the hybrid, operates as a process of addition that deploys the optical fields according to the group to which they belong. The consequences of this operation are subjective and material: unsettling the viewing positions in the former and distorting the visual fields in the latter. In unsettling the optical hierarchies inscribed in the original relations, the hybrid proposes new ones. However, as will be shown, this new optical structure is never static and secure; on the contrary, it is considered to be in motion, involving a constant process of adjustment and recalibration depending on who is optically commanding the new projected scene.

2.5.1 'The Purloined Letter'

Before analysing the formation of the new structure, I would like to start with Jacques Lacan's celebrated analysis of a short detective story by Edgar Allan Poe, which opens his volume of collected writings Écrits. On 26 April 1955, Lacan presented, in one of his weekly seminars, the contents of what would later become the seminar on 'The Purloined Letter'. In this seminar, Lacan used Poe's tale to analyse and explain the function of the *Symbolic* in the constitution of the subject. Poe's tale is a detective story that Lacan reinterpreted as two mirroring parts. The story begins with a letter received by the queen who, while reading it in her boudoir, is disturbed by the entrance of the king. Unable to hide the letter, the queen places it on a table in full view but with the address side up and its content unexposed. Her minister, who has just entered the room, recognises the handwriting and the distress of the queen, realises its importance, and decides to steal the letter. Its contents are unknown and never disclosed. However, the letter in question is said to contain an important message that gives "its holder a certain power…[which] is immensely valuable."[7] What is important in the story is that the robbery occurred in full view of the queen, who was forced to do nothing as any minor signal of distress would have raised the suspicions of the king, who was in the same room.

5 Ibid., p. 34.

6 Eisenstein and Leyda, p. 64.

7 The purloined letter p. 8

The second part of the story, according to Lacan, begins with the queen demanding that the prefect of the Parisian police, Monsieur G, recover the letter. After searching the minister's apartment several times without success, Monsieur G turns to the famous detective Auguste Dupin for help. Dupin advises him to go back and search once more for the letter on the minister's premises. Dupin realises that the letter must be still in the minister's possession and perhaps in full view. Days later, while wearing green spectacles to conceal his eyes, Dupin visits the minister in his apartment. While he is there, Dupin begins to inspect every corner of the apartment in his search for the letter; after a while, he discovers the dirty and crumpled stolen letter, most likely staged to appear as if it were an ordinary letter. Upon closer inspection, Dupin realises that the letter has undergone several alterations and that the sender and addressee are the same person: the minister. The next day, Dupin returns to the minister's apartment on the pretext of having left his snuffbox there. On this occasion, he creates a diversion outside the apartment window that distracts the minister for a few seconds, giving him time to replace the original letter with a copy written by him the day before.

2.5.2 The Displacement of the Signifier: Presence in Absence

Lacan's use of 'The Purloined Letter' examines the constitution of the subject through the *symbolic*. He reads the story according to three characters who experience three moments structured by three glances[8]. According to his description, "the first glance that sees nothing"[9] refers to the king and the police, the second glance "which sees that the first sees nothing and deludes itself as to the secrecy of what it hides"[10] refers to the queen in the first part and the minister in the second, and the third glance, which sees that the first two glances "leave what should be hidden exposed to whoever would seize it,"[11] refers to the minister and later Dupin.

Lacan identifies these three different glances as belonging to three subjective registers. Therefore, in the first part of the story, the position of the king as one who sees nothing is associated with the *real* — the *real* in this case being a more conventional description of an attitude of naiveté by the king,[12] who lacks awareness of the *symbolic* structure operating under his nose. The position of the queen as one who sees but cannot see what is being seen represents the *imaginary*, as she is narcissistically deceived by her ego. Therefore, the minister as one able to see the operation of the structure occupies the *symbolic* position. In the story, or at least in Lacan's interpretation of it, the positions are never stable but always in motion, changing according to the possession of the letter.

For Lacan, the letter in Poe's story serves to illustrate the constant search of the unconscious for a lost object: the repetition compulsion or what Lacan calls the repetition automatism[13] — the tendency to repeat unpleasant experiences manifested beyond the pleasure principle.[14] This lost object is seen by Lacan as a signifier, a symbol not of the object itself but of its representation as a presence marked by its absence.[15] Thus, in Poe's tale, the content of the letter is never revealed, yet its absence is what signifies or implies its 'power'. For Lacan, this absence, which is represented as a signifier, is what constitutes the subject and what determines him or her just as the Queen's letter situates the subject's symbolic relations.[16] In Poe's tale, the letter triggers a changing condition of subjectivity. The character's roles in the first part of the tale shift to opposite positions in the second part through their liaison with the letter as the signifier. The signifier constitutes the characters as deceiver or deceived and as spectators or performers, thus their identities are constantly displaced and de-centred by the letter's passage from hand to hand.

2.5.3 The Letter as Gaze: The Optical Signifier

If in Poe's story the signifier is represented by the presence of the letter, in the hybrid it is the Lacanian gaze that accounts for the constant manifestation of the signifiers (as part of the scopic drive), "that which looks at me from all sides."[17] The gaze appears as a

8 Jacques Lacan, "Seminar on 'the Purloined Letter'," in *The Purloined Poe: Lacan, Derrida & Psychoanalytic Reading*, ed. John P. Muller and William J. Richardson (Baltimore: Johns Hopkins University Press, 1988).

9 Ibid., p. 32.

10 Ibid.

11 Ibid.

12 John P. Muller and William J. Richardson, "Lacan's Seminar on "the Purloined Letter": Overview," in *The Purloined Poe : Lacan, Derrida & Psychoanalytic Reading*, ed. John P. Muller and William J. Richardson (Baltimore: Johns Hopkins University Press, 1988), p. 63.

13 Sean Homer, *Jacques Lacan*, Routledge Critical Thinkers (London ; New York: Routledge, 2005), p. 46.

14 Muller and Richardson.

15 Ibid.

16 Homer.

17 Lacan draw upon the work of Maurice Merleau-Ponty and Jean-Paul Sartre. Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, The International Psycho-Analytical Library (London: Hogarth Press, 1977).

precondition, a given sustaining the subject in the field of desire.[18] In the same way that language precedes the existence of a subject (the subject must learn the language and accommodate himself in it), in the scopic field the gaze precedes vision. As Norman Bryson notes:

> When I learn to speak, I am inserted into systems of discourse that were there before I was, and will remain after I am gone. Similarly, when I learn to see socially, that is, when I begin to articulate my retinal experience with the codes of recognition that come to me from my social milieu(s), I am inserted into systems of social discourse that saw the world before I did, and will go on seeing after I see no longer.[19]

The gaze is the manifestation of something that has been lost in the child's early stages of development, as a necessary condition to enter the symbolic order. This lost object, which Lacan calls *object a*, appears only as a representation or a signifier. The gaze is "the discourse of the Other,"[20] and this appears as an object to which desire is oriented in the field of the Other. This is the desire for the Other to recognise us, but also the desire for what this Other desires, i.e., what the Other lacks.[21] The psychoanalyst Bruce Fink clearly describes how desire operates in Lacan's theoretical work, stating:

> Lack and desire are coextensive for Lacan. The child devotes a considerable effort to filling up the whole of the mother's lack, her whole space of desire – the child wants to be everything for her, her-be all and end-all. Children set themselves the task of excavating the site of their mother's desire, aligning themselves with her every whim and fancy. Her wish is their command, her desire their demand. Their desire is born in complete subordination to hers: 'le désir de l'homme, c'est le désir de l'Autre' Lacan reiterates again and again.[22]

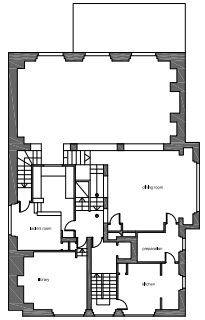
In the visual world, it is in the split between the eye and the gaze where the lost object (*object a)* emerges as a signifier; that is, between the conscious world of perception and the unconscious manifestation of a traumatic absence. The gaze is a constant search, the subject's desire to be confirmed as self and to be seen. Therefore, the gaze is always outside the subject, looking at him from all sides, threatening the perspectival arrangement of Renaissance that places the viewer as the only master of the scene, displacing it from that privileged position. For Lacan, this threat operates as a continuous attempt to destabilise the conscious vision, and although in Poe's detective story this is represented by the constant displacement of the letter, Lacan also describes this process as the performing of a media device. As he states:

> For we have learned to conceive of the signifier as sustaining itself only in a displacement comparable to that found in electric news strips or in the rotating memories of our machines-that-think-like-men, this is because of the alternating operation which is its principle, requiring it to leave its place, even though it returns to it by a circular path.[23]

It is no coincidence that Lacan used the analogy of a computer's memory to explain the 'insistence of the signifying chain'. Like Lacan's description of the signifier's path, in the domestic interior of both Villa Müller and Maison de Verre, the subjects' optical condition seems to revolve around the articulation of the space, defining the movement from one vantage point to another in a repetitive loop. The domestic interior can be compared to the function of the signifying path: a system that places signifiers in relation to each other. Therefore, a subject is a voyeur only in his relation to his object: an exhibitionist. Each visual field is a signifier, an optical field that pursues meaning in its relationship to other optical fields. This operation resembles that carried out by the film montage: an image, a fragment creates new relationships with the shots that precede and follow it. However, this comparison is only partially applicable. Whereas for Eisenstein a fragment (and image) already contained information of its own, for Lacan a signifier without a relation to other signifiers in the chain is meaningless: a subject without an object.

In Villa Müller and Maison de Verre, the identification of vantage points and their subsequent removal from the house entails the interruption of a signifying chain and also the process of optical montage as the insertion of signifiers in a new path: the hybrid. Therefore, the process of montage assumes two displacements. First, there is the removal of the optical field from its place: the house [fig. 2.30]. The optical fields are to the house what the photograph is to its referent; they represent a part of it, a slice that has been cut out, ripped from its context. This first move is accompanied by a second; the removal or loss of the optical field that determines the subjective position of each vantage point. What defines an exposed subject is not the optical field but the look of Others [fig. 2.31]. The hybrid is a sequence of drawings, a montage process that assumes with every new montage the formation of further optical confrontations constructing other intersubjective relations. Montage in the hybrid is the confrontation of the eye and the gaze, where the visual field in one domestic interior represents the gaze of a visual field in another interior.

The categories are always the same — exhibitionist, spectator, voyeur, and gender and social division — but structured differently, re-emerging in each montage as a repetitive displacement and replacement. If in Poe's story the intersubjective relations change according to the shifting position of the letter, then in the hybrid the intersubjective relations are determined by the placement and displacement of different optical fields.



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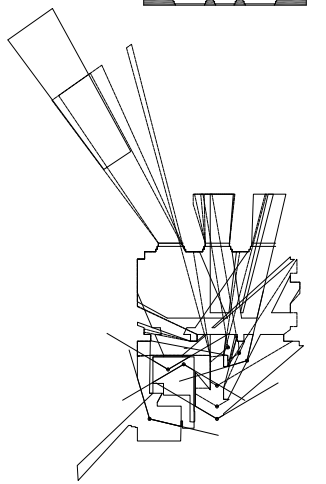


2.31

2.30 and 2.31 — All the different visual fields at the main hall 'level' in Villa Muller, are removed from the house. Sebastian Aedo

18 Ibid.

19 Norman Bryson, "The Gaze in the Expanded Field," in *Vision and Visuality : Discussions in Contemporary Culture.*, ed. Hal Foster and Dia Art Foundation (Seattle: Bay Press, 1988).

20 Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, p. 84.

21 There is another stage in the child's subjective formation that leads him/her to the symbolic order. It is through the interruption of the Name-of-the–Father (the paternal figure) that mother-child unity is cancelled. The child finds in his paternal figure (through the mediation of language, commanding how to behave, what to do and what not to) the name for that which his mother desires. Thus, The Name-of-the–Father becomes the child's "primordial signifier" splitting — in a traumatic experience — the mother-child unity. This primordial signifier is replaceable by language, constantly displacing the signifier (which represents lack) towards other signifiers. The mother's lack is now assumed by the child — in a metonymic process — as his own, which he is constantly trying to fill. Therefore, as Lacan says: "Man's desire is the desire of the Other". In this sense, Other, with a capital O, refers also to the Other as 'otherness', to another person, or to a whole social body from which we, as subjects, assume they expect (desire) something from us. See: Bruce Fink, "The Subject and the Other's Desire " in *Reading Seminars I and Ii : Lacan's Return to Freud : Seminar I, Freud's Papers on Technique, Seminar Ii, the Ego in Freud's Theory and in the Technique of Psychoanalysis*, ed. Richard Feldstein, Bruce Fink, and Maire Jaanus (Albany, N.Y.: Albany, N.Y. : State University of New York Press, 1996).

22 Ibid., p. 81.

23 Lacan, "Seminar on 'the Purloined Letter'."

2.5.4 The First Montage: Exposed and Surveyed

The structure of the hybrid forms a sort of panoptical arrangement. The 'exposed' positions from Villa Müller and Maison de Verre are placed at the centre, projecting their visual fields as a centrifugal force in opposition to their centripetal locations [fig. 2.32]. Outside this centre, the spectator's positions are allocated looking inwards [fig. 2.33]. However, this panoptic planning escapes Jeremy Bentham's logic; its centre is not the place of one but of many positions that look as much as they are looked at. This arrangement recalls Thomas Mathiesen's theory of *synopticism*, characterised in modern societies by the introduction of mass media where, through different types of media screens, the audio-visual audience (the many) has the chance to constantly watch and monitor an individual (the few): film stars, VIPs, reporters, politicians, and so on.[24] The concept of *synopticism* appears useful in understanding the uncertainty arising from surveillance techniques caused by the insertion of new media devices and modes of communication. As Mathiesen says:

> I am thinking, of course, of the development of the total system of the modern mass media. It is, to put it mildly, puzzling that Michael Foucault, in a large volume which explicitly or implicitly sensitizes us inter alia to surveillance in modern society, does not mention television — or any other mass media — with a single word. It is more than just an omission; its inclusion in the analysis would necessarily in a basic way have changed his whole image of society as far as surveillance goes…Formulated in bold terms, it is possible to say that not only panopticism, but also *synopticism* characterizes our society, and characterized the transition to modernity.[25]

The hybrid can be read as a network of significations, data, and information; an inscription surface where each new optical field added to the structure disturbs the definition of the drawing. In an accumulation of lines the drawing becomes the site where the domestic interior is rendered as if in a constant act of interruption. Thus, each new montage appears as the intrusion of a gaze, blurring but also distorting the optical fragments. In a world saturated by the presence of the media, the irruption of the gaze can be compared to the collapse of the distance required to see the television or computer screen: too close to the screen and the image fades, blurs and disintegrates into a series of points of light. In this sense, the gaze can be used as a metaphor for poor image quality, such as noise affecting the high-resolution images on the screen.

However, for Lacan, a human subject is the only being able to tame the gaze, to play with their mask. Unlike insects, the subject can protect themselves from the gaze; essential to this ability is the concept of the screen, which is the locus of mediation between vision and visuality.[26] Thus, the screen is "an envelope, thrown off the skin."[27] Its function is to moderate the light of the gaze, allowing us to see. As Lacan says:

> If, by being isolated, an effect of light dominates us, if, for example, a beam of light directing our gaze so captivates us that it appears as a milky cone and prevents us from seeing what it illuminates, the mere fact of introducing into this field a small screen, which cuts into that which is illuminated without being seen, makes the milky light retreat, as it were, into the shadow and allows the object it conceals to emerge. At the perceptual level, this is the phenomenon of a relation that is to be taken in a more essential function, namely, that in its relation to desire, reality appears only as marginal.[28]

In this sense, it is interesting to see how, for Lacan, the screen described operates in direct reference to the cinema screen, as if it were a media-like apparatus. The Lacanian screen conceals the real in favour of a 'reality' that is highly mediated. The function of the screen is to 'ease' the presence of the gaze, domesticate it, integrate it into the field of representation, and thus the gaze is never manifested as such, but always through its mediation. From this perspective, the hybrid as a material object (as drawing) operates as a screen, facilitating the representation of the gaze through the mediation of a system of representation (the orthogonal projection). Moreover, the hybrid is not a fixed structure, it suggests constant motion from one position to another. In this sense the hybrid is 'activated'. This means that when we choose a specific position within its structure, a new visual field is formed that resolves the interruptions caused by the accumulation of lines.

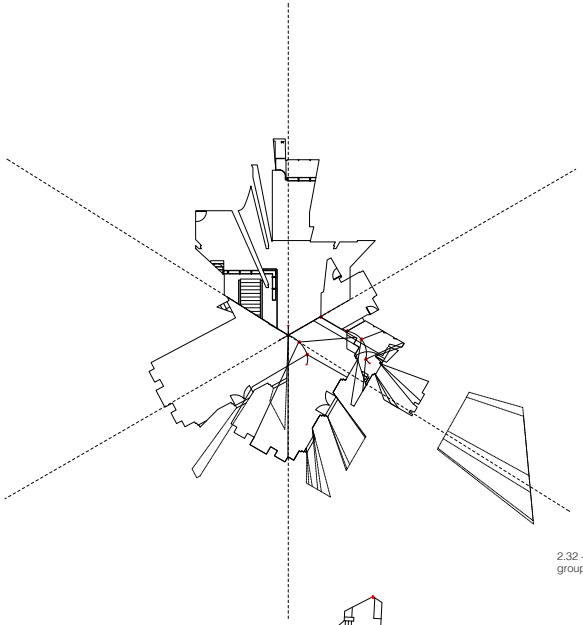
24 Thomas Mathiesen, "The Viewer Society: Michel Foucault's 'Panopticon' Revisited," in *Surveillance, Crime and Social Control: International Library of Criminology, Criminal Justice & Penology. Second Series*, ed. Clive Norris and Dean Wilson (Aldershot: Ashgate, 2006).

25 Ibid., p. 45.

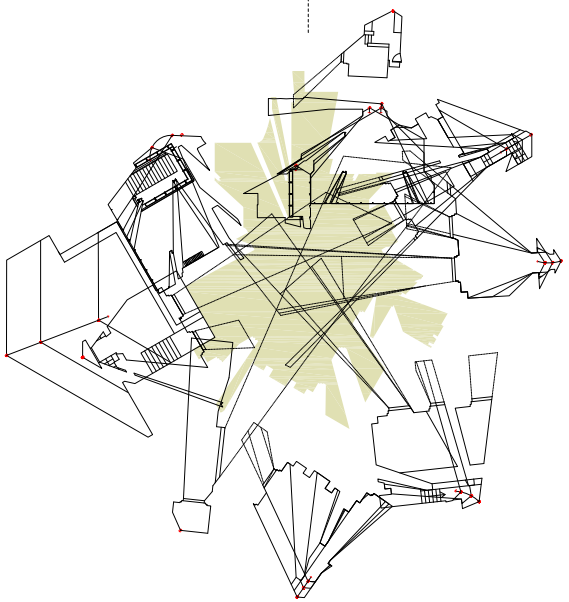
26 Bryson.

27 Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, p. 107.

28 Ibid., p. 108.



2.32 — Panoptical arrangement of the first group 'exposed'. Sebastian Aedo.



2.33 — 'Spectators' visual fields surrounding the 'exposed'. Sebastin Aedo.

Each time a new vantage point is added, the optical encounter of two or more positions can be altered and merged, expanding or compressing a new visual field for each vantage point. It is through the construction of new optical fields (following an encounter with two or more optical fields) that previous optical interruptions can be overcome, dissipating and avoiding any accumulation of previous optical montages.

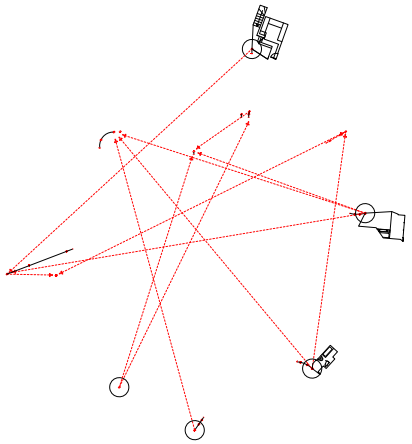
2.5.5 Second Montage: Voyeur

In this process of hybridisation, there is a recurring pattern of condensation (montage) and conversion (new intersubjective relations). Unlike Lacan's interpretation of Poe's story, which is structured by three glances, the hybrid is structured by four; suggesting further ramifications where every new optical field added to the system brings into play and destabilises a previous order. The next position added after those that are exposed and surveyed is that of the voyeur. There are two situations identified as such in Maison de Verre, where it is possible to identify a potential viewer either entering Dr Dalsace's daughter's room or a viewer inside the adjacent guest's room. In the former, the optical field can reach the daughter's shower, which is a perforated metal door with a bookshelf on both sides. Even when the doors are closed, it is possible to see the body screened behind the punctured metal shelf. In the latter, the wall dividing the rooms is, like the façade of the house, made of translucent glass. The light entering from the window to the garden illuminates this wall as a big screen. Anyone on the other side can see the silhouette of a body projected onto its surface; the body is simultaneously framed and exhibited. In the hybrid, these two positions are located facing backwards onto the positions of the two spectators [fig.. 2. 34]. Consequently, there is a private scene behind the spectator that can be transgressed; the spectator can turn to look back at Dr Dalsace's daughter and occupy the place of the voyeur. However, this situation is interrupted by the montage of another position: gender division.

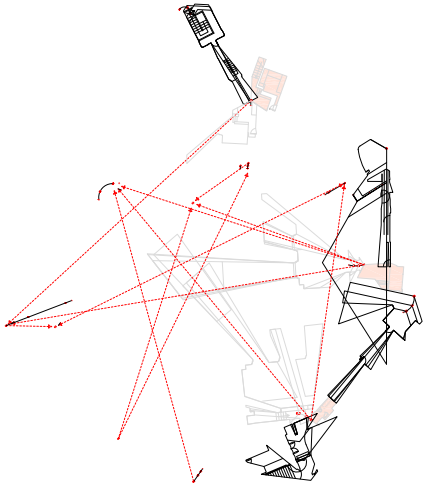
2.5.6 Third Montage: Gender and Social Division

The first position, categorised as such, optically connects the domestic stairs with the service stairs as if it were a doppelganger emphasising a higher social status. This position is a montage next to the visual field of Mrs Müller's boudoir [fig.. 2.35]. The boudoir, as a spectator setting that looks downwards almost theatrically onto the social space of the house, is interrupted by the look from the stairs. Mrs Müller's position now constantly interplays between the space of control and the space assigned to a lower social type, simultaneously in command of the social relations yet excluded from them. The second montage is from Mrs Müller's wardrobe, which oversees the child's room. This view, which crosses from one room to another, places her as the caregiver of the family. In the hybrid, Mrs Müller's visual field is placed in opposition to the voyeur looking towards the translucent window inside the Maison de Verre guest's room. Thus, the subject is now assaulted by Mrs Müller's gaze. This new montage unsettles the previous order and introduces a shift between voyeur and exhibitionist. The last position is the entrance of Dr Dalsace's consulting room. Just before turning into this space, an adjustable mirror is located on one of the columns, highlighting a gender condition that isolates the space as exclusively feminine. This position is reversed in the hybrid, where it is superimposed to look at the voyeur's position inside the Maison de Verre's guest bathroom. This voyeur is now viewed by one of Dr Dalsace's patients, whose look positions her as a surveyor of domestic privacy.

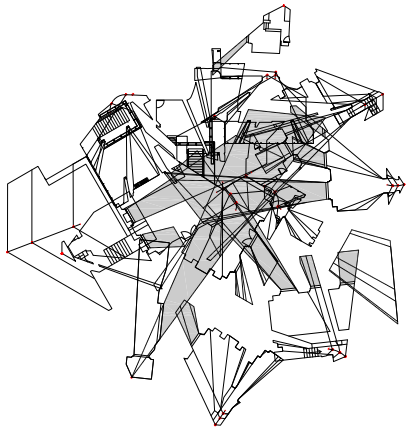
In this section I have explained what the hybrid is and how it operates as a new network of signification. In the next section, I will explore the subjective and material consequences of the hybrid through a series of scenographic drawings that construct four specific positions within the hybrid. In this sense, the orthographic representation of the hybrid is first transformed into a perspectival image. However, although this perspective construction assumes a viewing subject who is the master of the scene; it is precisely through the interruption of others' visual fields that this viewing condition is challenged and contested. Furthermore, through a series of physical models, the next section explores the materialisation and spatiality of these optical relations.



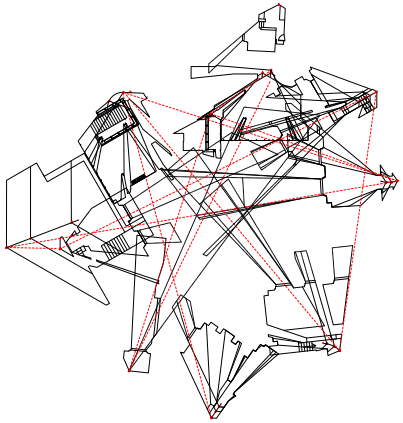
2.34 — The three voyeurs are placed behind some of the spectator's positions. Sebastian Aedo.



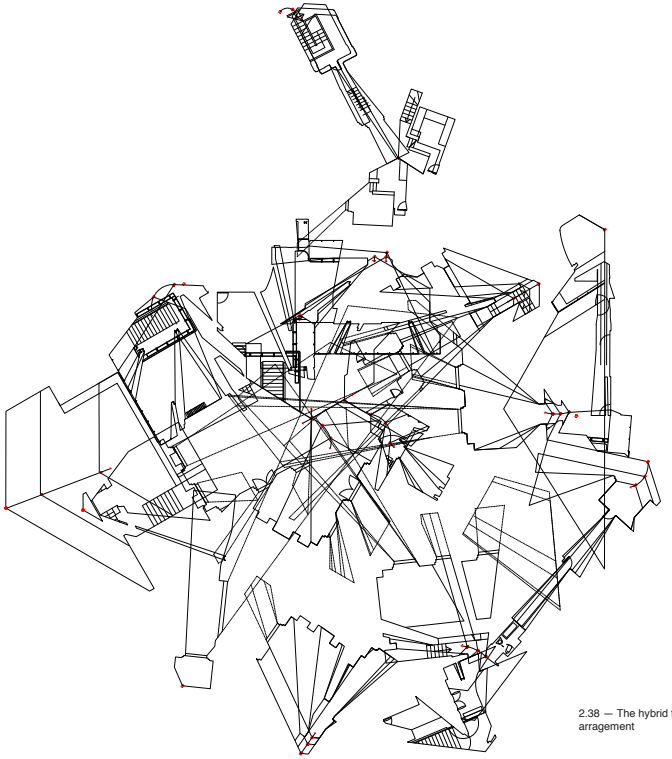
2.35 — Montage of 'social and gender division' onto voyeur's positions. Sebastian Aedo.



2.36 — The drawing shows the optical choreography between 'exposed' and 'spectators'



2.37 — Visual relations between 'spectators'

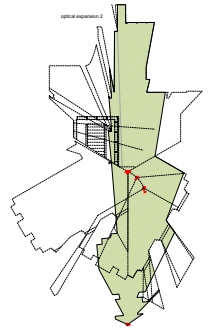


2.38 — The hybrid final arragement

2.6 The Scenographic Representation as an Optical Apparatus

To explore further the consequences of the optical montage, the following drawings show four different positions within the new perspectival ensemble of the hybrid. These positions are shown from a specific vantage point, giving a kind of scenographic view that results from the crossing over of diverse visual fields. These intersections entail a discussion of the relationship between the eye (as subject), and its visual field (the area covered by the visual pyramid). Each scenographic drawing shows a visual field that has been distorted by intersection with other such fields; it expands, contracts or contains a visible area [fig. 2.39].

To explore in detail the consequences of these 'eyes' that have the capacity to organise space while disrupting the position of a stable viewer, it results suitable to begin with a discussion of two different interpretations of Diego Velázquez's painting *Las Meninas*. One was carried out by Michel Foucault in the introduction to his work *The Order of Things*, the other by Jacques Lacan in his XIII Seminar entitled *The Object of Psychoanalysis* in 1965 and 1966. I will use these interpretations as a model for understanding how perspective can be used to discover alternative optical structures that build a specific subject, sustained by phantasy and desire. This analysis will be an aid to understanding the one relating to the scenographic drawings — a sophisticated combination of eyes, visual fields and windows that articulates and proposes a new domestic interior.



2.39 — Modification of the visual field after montage

2.40 — Diego Velázquez "Las Meninas" (1656). Museo del Prado. Madrid.

2.6.1 The Eyes

In his introduction to *The Order of Things*, Michael Foucault comprehensively analyses *Las Meninas*. Foucault's analysis suggests the emergence of a new visual regime in the period. The painting can be seen as a turning point in the history of knowledge — an evolution from the classical visual regime to a regime that places 'human' as the object of knowledge (i.e. from a classical to a modern episteme). Thus, for Foucault, the painting came to represent neither the one nor the other, but a transition between the two. In the picture, the painter is looking towards the spectator; caught in the very act of painting, Velázquez sees an image that is visible only to him and the other figures in the painting: the Infanta Margarita, with an entourage of *duennas*, maids of honour, courtiers and dwarves. Behind them are Doña Marcela de Ulloa with a guardadamas; in the foreground, framed by the back door, Don José Nieto Velázquez [fig. 2. 40].

What is invisible for us at first glance — the subject of the painting — becomes part visible through the reflection of a mirror located in the background. In the mirror are reflected the images of two figures: King Philip IV and his queen Mariana. Foucault's reading of Velazquez's painting highlights the simultaneous presence of two types of invisibility: one is in the very nature of this painting (the invisibility of the models) and the other part of the nature of pictorial representation in general (the viewer)[1]. As he writes:

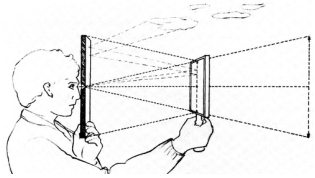
> Here the action of representation consists in bringing one of these two forms of invisibility into the place of the other, in an unstable superimposition — and in rendering both, at the same moment, at the other extremity of the picture.[2]

In *The Order of Things* Foucault explains the transition in which the absent subject — the viewer, who sees the object of representation (the painting) — eventually becomes not only visible, but also an inherent part of the representation (the painting is about the viewer). However, for Foucault, *Las Meninas* still portrays a subject that can only be inferred through the reflection in the distant mirror and is still not completely present.[3] In *Las Meninas*, Man is both "an allegedly neutral metasubject of knowledge and its proper object viewed from afar."[4]

Underpinning Foucault's analysis of *Las Meninas* is the existence of an eye that is simultaneously inside and outside the representation, the result of an unpredictable game of impersonations, doubles, gazes and reflections. In this sense, I would like to stress Foucault's interpretation of the construction of the space, the lines of forces that mark the centre of the composition — the place occupied by the viewer. The centre is not, according to him, derived from a vanishing point (the latter lies elsewhere, at some imprecise point around the figure of José Nieto Velázquez) but through the convergence of some of the characters' gazes at some invisible point outside the area of representation, marking our invisible presence. As Foucault says:

> …the line issuing from the mirror, crosses the whole of the depth represented (and even more, since the mirror forms a hole in the back wall and brings a further space into being behind it); the other line is shorter: it comes from the child's eyes and crosses only the foreground. These two sagittal lines converge at a very sharp angle, and the point where they meet, springing out from the painted surface, occurs in front of the picture, more or less exactly at the spot from which we are observing it. It is an uncertain point because we cannot see it; yet it is an inevitable and perfectly defined point too, since it is determined by those two dominating figures and confirmed further by others.[5]

For Foucault, it is the eyes of the two sovereigns, projecting their visual field outside the surface of the canvas, that mark the centre of the composition. This does not correspond to the centre derived from the vanishing point, but to an equally possible point described by Hubert Damisch — in his own analysis of the painting — as the painting's 'imaginary centre' as distinct from its geometric one[6]. Thus, if we rely on Foucault's description (and if we consider it important that the picture plane is parallel to the wall at the back of the composition), then we could say the picture has two centres[7]. One is produced by the projection of an 'eye' (as subject, the Infanta and the royal couple's reflection in the mirror) that looks at us (the viewers) outside the canvas. The other is produced by the projection of another 'eye' (as a vanishing point) that organises the space from a different centre.[8] Thus, the viewer outside the picture oscillates between its virtual centre (in the mirror and at the point where the gazes converge), and its real centre (at the vanishing point). For Foucault, the presence of the subject is determined not by the invisible eye of perspectival construction (the reflection of our own ephemeral being), but by the discernible eyes of certain figures in the picture. Whatever they bring us, inside or outside the picture, our presence as viewers is asserted by the visibility of an eye, and confirmed by our own visibility as objects of representation.



2.41 — Filippo Brunelleschi mirror experiment (ca. 1425).

In my own scenographic drawings taken from the previous hybrid structure, these two eyes converge. There is no vanishing point without a subject being present. Each vantage point emerges from an 'eye' that reduces the space before it towards its own centre. We can compare this situation to the one produced by Filippo Brunelleschi's mirror experiment. To probe the accuracy of his perspectival construction[9], Brunelleschi placed a mirror between his own eye fixed behind a peephole in a *drawing* of the Baptistery in Florence and the building itself — literally catching the eye at the centre of the perspectival scene [fig. 2. 41]. However, this is complicated by the fact that in my own scenographic drawings the eyes of the subject are concealed behind the image. When their visual field is before us, what we see is not a subject but the vanishing lines of the space. This is represented by the perspectival construction of photography and by manipulation of the image, which is sometimes skewed in relation to our position as viewers. The scenographic drawing is not a single scene; it is instead a

1 Michel Foucault, *The Order of Things : An Archaeology of the Human Sciences* (London: Routledge, 1974).

2 Ibid., p. 8.

3 Martin Jay, *Downcast Eyes : The Denigration of Vision in Twentieth-Century French Thought*, A Centennial Book (Berkeley: University of California Press, 1993), p. 406.

4 Ibid.

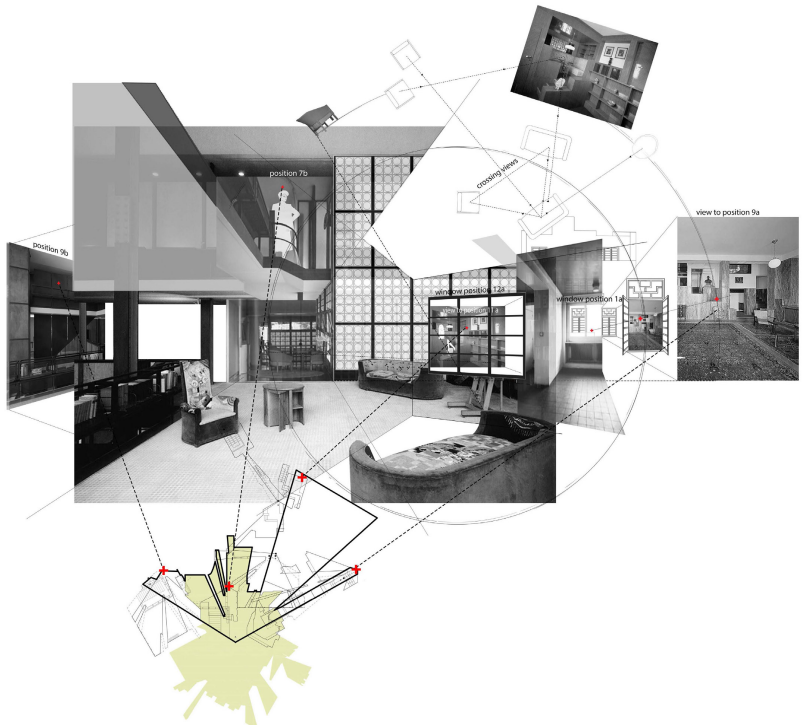
5 Foucault.

6 Hubert Damisch and J. Goodman, *The Origin of Perspective* (Cambridge, Mass. ; London: MIT Press, 1994), p. 433.

7 Hubert Damisch explains that to understand the vanishing point as simultaneously being the place of the subject (viewer), comes from Filippo Brunelleschi's mirror experiment. In this experiment, Brunelleschi placed one eye behind a small hole on his painted panel facing a mirror. Through this device, he managed to confirm the accuracy of his perspectival representation at the same point from which he was observing the actual building. As Damisch says: "This is the meaning of Brunelleschi's demonstration — the fulcrum for two axes running in opposite directions: one preceding from the point of view to the vanishing point, and another from the vanishing point to the point of view". Ibid., p. 332.

8 In a thorough analysis of John R. Searle, ""Las Meninas" and the Paradoxes of Pictorial Representation," *Critical Inquiry* 6, no. 3 (1980). Joel Snyder and Ted Cohen rejected the idea of the painting as a "paradox of self-reference" and (like Jacques Lacan) assume the image of the rear canvas to be the depiction of *Las Meninas* itself. As a consequence, they propose that a point of view is "a function of a painting" (its narrative, or imaginary dimension) rather than "how a painting looks". According to them this means that while the painting is organised through the position of a vanishing point, the viewer does not have to be positioned in front of that point to appreciate it.

9 Huber Damisch remarks that is not completely clear if Brunelleschi was using his optical device to either probe the veracity of its perspectival construction or rather as a mechanism that aided in its construction. Damisch and Goodman.



2.42 — Scenographic drawing #1. A view from the main hall of Maison de Verre is intersected by three other vantage points: position B5, B4 and A5. The Main hall also projects its view towards position A8 the ladies' boudoir at Villa Müller. Sebastian Aedo.

montage of scenes within a principal one. Each one organises the space in its own way, situating a subject always in relation to another subject; an image exists always in relation to other images.

We see this situation in the case of a subject standing inside the main hall of Maison de Verre — looking towards Dr. Dalsace's studio and with the big glass screen behind him — where multiple other vanishing points cause a unique centre that disperse towards several trajectories (scenographic drawings 1) [fig. 2.42]. However, unlike in Foucault's reading of *Las Meninas*, the different viewpoints do not converge in a common point outside its own surface of representation, but rather cross over in different directions. Thus, our presence at the vantage point is not confirmed by the look of others, or by a unique geometrical centre, but dispersed among different eyes (vanishing points) that respond to their own virtual and geometric centres. These correspond to position (B5) from Maison de Verre's Mezzanine next to the kitchen access, looking towards the main hall; position (B4) from Mrs. Dalsace's 'spying corner' looking towards her husband's consulting room; and (A5) from Müller Villa's main stairs looking towards the main hall. These three positions correspond to three different subjects, and within the main scenographic scene they form their own centre.

From this relationship between an external eye looking in and several eyes that either look outwards or deeper into the scene and the intersection of all of them, a unique visual field is defined, characterised by an uneven reciprocity.

2.6.2. The Window

Foucault's analysis leads on to another interpretation of Velázquez's work and a discussion of the subjective consequences for, and the problematic position occupied by, the viewer; more radically, how the concept of the 'window' marks the interval between the double place of the viewer (as subject and object, as being both outside and inside the representation) that is not confirmed through his visual refraction but by a complex 'apparatus' operating under the logic of phantasy and desire. This was the interpretation of Jacques Lacan in his XIII seminar entitled *The Object of Psychoanalysis*. Here Lacan uses the structure of perspectival construction to discuss the operation of the scopic drive (the drive concerned with vision) and how phantasy is constructed in the subject. He begins with a very precise and detailed analysis of perspectival construction taken from Erwin Panofsky's book *Perspective as a Symbolic Form*. In his description, Lacan designates one point located along a line representing the horizon on the picture plane, calling it point 'S'[10] [fig. 2.43]. He adds another point to this first point or 'eye'[11], at an arbitrary distance from it — defined by the draughtsman. The purpose of this second point (situated beyond the picture surface) is to define a distance, the depth that outlines the receding ground plane [fig. 2.44]. This second point, Lacan argues, is not a device used by the artist, but an important part of the structure of the subject:

> Does this mean that from the point of view of the structure of the subject, in so far as the subject is the subject of the look, that he is the subject of a seen world, this is what interests us, does that mean that we can neglect this part of the subject, that it only appears to us in function of an artifice, while the horizon line is structural, the fact that the choice of distance is freely left to my choice, to me who is looking, I can say that what we have here is only an artifice of the artist, that it is from the distance at which I put myself mentally from one or other place that I choose in the depths of the picture that this is therefore in a way out of date and secondary and not structural. I am saying it is structural and no one has ever sufficiently noted it up to now.[12]

When viewed frontally, these two points seem to coincide and to be one. They are, nevertheless, two different points from which the space is organised and measured. The two 'eyes', for Lacan, are not merely a mode of representation, but the very structure of a subject. Hence, perspectival construction — in its two-point perspective mode[13] — helps Lacan to model a subject that happens to be fundamentally divided. This division, Lacan argues, is sustained by a '*monture*', the *objet petit a* constituting the 'object cause of desire'. In the scopic relationship between the subject and the world, Lacan locates this object on a plane parallel to the

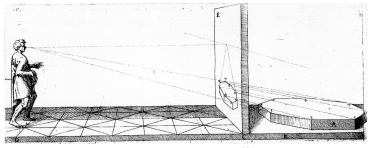
10 This point, would correspond to the technique developed by Leon Battista Alberti, that situates the vanishing point in the picture as if corresponding with the eye of the beholder.

11 Lacan calls it the "eye point of the subject". Jacques Lacan, "The Seminar of Jacques Lacan: Book Xiii: The Object of Psychoanalysis: 1965-1966," *http://www.lacaninireland.com/web/translations/seminars/* (2011): p. 237.Seminar wednesday 11 May 1966. [in French] Le séminaire de Jacques Lacan: 1965-1966. L'objet de la psychanalyse. séminaire XIII

12 Ibid., p. 238.

13 This mode was developed by the French Priest Jean Pélerin, Known as Viator. Svetlana Alpers makes a thoroughly analysis of this method, and compares it to the one developed by Alberti's model of one point perspective, which she names as the "window" mode of representation, while Viator's model would correspond, according to her, to a "surface" mode. This two modes of perspectival construction differentiates themselves in that the former one, is constructed out of an eye that is placed outside the canvas in front of the scene, assuming the priority of a beholder; whereas the "surface" type of representation, places an eye within the surface of the canvas inside the scene and thus the viewer is always someone other and alien to the image, as if the "world cast itself" on it. See: Svetlana Alpers, *The Art of Describing : Dutch Art in the Seventeenth Century* (London England: J. Murray, 1983). And: "Interpretation without Representation, or, the Viewing of Las Meninas," *Representations*, no. 1 (1983).

2.43



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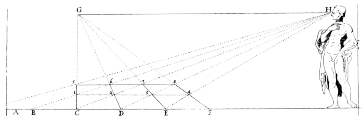

2.43 — The first "regola" or the "costruzione legittima," in GIACOMO BAROZZI DA VIGNOLA, Le due regole della prospettiva practica (Rome, 1583).

2.44 — The second "regola" or the distance-point method, in GIACOMO BAROZZI DA VIGNOLA, Le due regole della prospettiva practica (Rome, 1583)

surface of representation (where the second vanishing point is located). It is on this invisible plane — beyond the representation, and thus invisible (where the representation reaches its end) — that something is elided but fundamentally present. Lacan calls it a window,[14] which happens to be the turning point of a closed structure, identified by him with a topological figure.[15] Thus, this 'window' came to represent for him a pause, a point of return at which our look intersects with our returning look — the gaze. Unlike Foucault, the gaze is not the product of specular reflection, but of a deep void indicating an orientation of desire, always displaced towards the field of the Other. This structure is the fundamental part of the subject's scopic relation to the world. The window, in short, is the function of the signifier.

At this point, Lacan returns to discussing *Las Meninas*. Velázquez's masterpiece "extends into the dimension of the window,"[16] the turning point where the viewer's look returns to him but always as something different, as something other. According to Lacan this point of return is located in the interval (distance) between the picture plane and the back of the canvas represented in the painting, a pause validated by the distance created between Velázquez's figure looking at us, and the turned back of his canvas [fig. 2.45]. It is here that the relationship between *Las Meninas*, the scopic drive and perspectival construction can be articulated; the distance between Velázquez's figure and his canvas is equivalent to the distance at which the second vanishing point — the other subject (which in any other classical representation would be obscured) — should be placed[17].

What *Las Meninas* came to represent for Lacan is how the structure of the subject — at the level of the scopic drive — is arranged, and thus how phantasy operates in relation to the different viewpoints established in the picture. As he puts it: "We are here to see how this picture [*Las Meninas*] inscribes for us the perspective of the relationships of the look in what is called phantasy in so far as it is constitutive."[18] The painting, for Lacan, expresses a series of looks that show nothing but the subject's own desire.

Through a fictitious dialogue which Lacan infers from the picture, the little Infanta (like us) expresses her desire (like us) to see what is behind the canvas. So, when she says 'Let me see' — the conscious subject moves by desire — the reply is Velázquez's sentence "You never see me from where I am looking at you"[19]. Hence, the picture does not behave like a mirror (as in Foucault's interpretation), there are no reciprocal exchange of looks. While we are persuaded to imagine what may be on the other side of the canvas, we find ourselves trapped by it; by the gaze frustrating our search. The gaze turns us into an object, not literally epitomised by the look Velázquez gives us, but by a fundamental void, a window (part of a topological space) representing the return journey from the subject to subject.

In his analysis of *Las Meninas*, Lacan found a perspectival construction *screening* a topological one (i.e. something that can be inferred but is not completely visible). The former is the basis for an illusory and ideological representation of the space; the latter is the structure of the scopic drive in which subjectivity operates.

14 Lacan, p. 199.

15 The closed structure is the structure of the painting that represents the structure of the subject. Lacan identifies it with a topological figure, the Mobius strip. He says: "For if we have sufficiently explored the mechanism of the drive to see that what is happening in it is a return journey from the subject to the subject, provided one grasps that the return is not identical to the outward journey and that, precisely, the subject, in conformity with the structure of the Moebius strip, fastens on to itself there after having completed this half-turn which means that, starting from its front, it comes back and is stitched onto its back, in other words, that it is necessary to make two drives circuits for something to be accomplished, which allow us to grasp what is authentically involved in the division of the subject. This indeed will be shown to us by this picture [*Las Meninas*]." Ibid., p. 201.

16 Ibid.

17 This distance is determined by the artist, and is supposed to correspond to the ideal distance from which the representation should be seen. This distance that marks the relationship between the artist and his work, and subsequently between the viewer and the image, becomes visible in *Las Meninas* by Velázquez's gesture of stepping back, which also results in his phantasmatic appearance in the picture.

18 Lacan. Seminar wednesday 11 May 1966

19 Ibid., p. 271.Seminar wednesday 18 May 1966

2.45

2.46

2.45 — According to Lacan, The distance between Velázquez's figure and his canvas is equivalent to the distance at which the second vanishing point — the other subject — should be placed.

2.46 — René Magritte "The Human Condition" (1933). National Gallery of Art Washington.

2.6.3. The Return of the Eye from the Window

As part of the scopic drive, the window marks the fulcrum between our conscious eye and our unconscious gaze that threatens to return to us. To prevent a direct encounter like this, however, the window is screened. We never look directly without the intervention of the picture, since what lies on the other side is just the void of subjectivity, the "Thing-in-itself"[20] (*objet a*). Thus, the pictorial surface acts as a screen and is constantly creating the phantasy of a self-reflexive subject. "I see myself seeing myself"[21], as Lacan says, denying the alienation inherent in the subject, his dual role as subject and object. Moreover, taking the example of René Magritte's painting *The Human Condition* — where a landscape outside a window is blocked by a painting of the same landscape on a canvas — Lacan described how the image operates as the function of phantasy [fig. 2.46].[22]

We constantly see the world as a representation, a collection of our own images. This creates the illusion that the world is accessible through an act of pure vision. We believe the world to be an unmediated and objective reality lying before us, and we are thus detached spectators of the world as a spectacle. This imaginary division between representation and viewer is discussed by Roland Barthes as the inescapable condition of any subject who places himself in relation to an object. Representation for Barthes is not so much about its relationship with an original as a viewing condition:

> Representation is not defined directly by imitation: even if one gets rid of notions of the 'real', of the 'vraisemblable', of the 'copy' there will still be representation for as long as a subject (author, reader, spectator or voyeur) casts his *gaze* towards a horizon on which he cuts out a base of the triangle, his eye (or his mind) forming the apex. The 'Organ of Representation'…will have as its dual foundation the sovereignty of the acts of cutting out [*découpage*] and the unity of the subject of that action.[23]

20 Slavoj Žižek, *Tarrying with the Negative Kant, Hegel, and the Critique of Ideology* (Durham Durham, N.C.: Durham : Duke University Press, 1993). Žižek, explores Lacan's concept of the gaze as the manifestation of the Real through Rene Magritte's *La Lunette d' approche* (The field glass) from 1963, in which the gap left by an open window undo the same landscape we see through its glass pane.

21 Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, The International Psycho-Analytical Library (London: Hogarth Press, 1977), p. 81.

22 "The Seminar of Jacques Lacan: Book Xiii: The Object of Psychoanalysis: 1965-1966."Seminar wednesday 25 May 1966

23 Roland Barthes and Stephen Heath, *Image, Music, Text* (New York: Hill and Wang, 1977).

Representation takes place with a cutting-out, that frames and filters what is within the frame (as representation) and what is not (as nothing). In his definition of representation, Barthes placed cultural activities like theatre, painting, and literature side by side; he refers to them as being facilitated by this 'cut-out' that separates subject from representation, as if looking through a window. He continues:

> The tableau (pictorial, theatrical, literary) is a pure cut-out segment with clearly defined edges, irreversible and incorruptible; everything that surrounds it is banished into nothingness, remains unnamed, while everything that it admits within its field is promoted into essence, into light, into view.[24]

Lacan sees this cut-out as an imaginary perception of the world: "The world is all-seeing, but it is not exhibitionistic, does not provoke our gaze. When it begins to provoke it, the feeling of strangeness begins too."[25] The gaze emerges outside ourselves, and it is through the function of the screen that is deceitfully placed as representation and images, just as Barthes describes the *dioptric arts*.

2.6.4. Reconfiguration I

At this point it is appropriate to establish the link between these 'windows' that allows Velázquez not only to appear in the picture, but also to appear as an object in the dimension of phantasy; and the 'windows' of the scenographic drawings, as the intersection between one visual field and another — the confrontation between subject and object, between look and gaze, which appears as a photograph within a photograph.

These windows, in the scenographic drawings, reverse the optical hierarchies as they appear in the original positions by changing the vantage points they are viewed from; they represent a gaze that looks back at us. And this *looking back* is not achieved by the direct manipulation of the drive, but by the 'surgical operation' of montage carried out before in the hybrid, this is, by modifying the medium in which the scopic drive operates. The gaze emerges as a consequence of the houses' calculated manipulation, reversing the visual field of the subject, and thus making visible the invisibility of the gaze as part of the scopic drive. However, this operation is extremely paradoxical. The drawings — as representation — never shows the gaze directly, but only through its own mediation on the screen, or what Lacan sometimes name as the mask. As he points out:

> It is not true that, when I am under the gaze, when I solicit the gaze, when I obtain it, I do not see it as a gaze. Painters, above all, have grasped this gaze as such in the mask and I have only to remind you of Goya, for example, for you to realize this.[26]

In this sense, we can say that the screen, becomes thinner, less opaque, more evident perhaps, but there is still a surface of representation concealing the traumatic penetration of the *object a* into our field of vision.

At the same time, the scenographic drawings do not imply the optical confrontation of two positions but rather, depending on the vantage point, usually suggest simultaneous optical assemblages. The scene is inserted by multiple positions (as windows), each of which constructs alternatives and parallel detours that return differently the viewer's scopic journey. This means each one of them has a gaze that is looking at me from a different point.

In Scenographic Drawing 2 [fig. 2.47], for example, the previous position of an exposed subject (or what can we also called a performer), entering into the main hall of Müller Villa, is reversed by the insertion of three other positions, (A4), (A11) and (B9). These three positions are now under the *regards* of the previous exposed subject, and thus, the original optical hierarchy is challenged and undone. In the scene, both positions work against themselves. We as viewers (in place of the former exposed) appear to be on the other side of our own window, as if seeing things from the point of our own gaze. Thus, the drawings produce a visual circuit, a force-field of visual relation that we travers. But in this crossing, we never look again to ourselves, as if in a mirror reflection, since — as Lacan clarified in his interpretation of *Las Meninas* — we can never see from where the gaze is looking at us.

The scenographic drawings, as part of a process of reconfiguration, unsettles hitherto accepted relationships of power between social and genders groups through the medium of perspectival representation. In the domestic interior organised by the eye, we find a hidden structure, another optical 'apparatus'— the scopic drive, that pulsates surreptitiously against the first structure, threatening to shift previous relations between subject and object. This means struggling to undo the illusory notion of the space as 'cut-out'.

In this regard, the scenographic drawings do not simply show the positions of subjects working against other subjects. In fact, there

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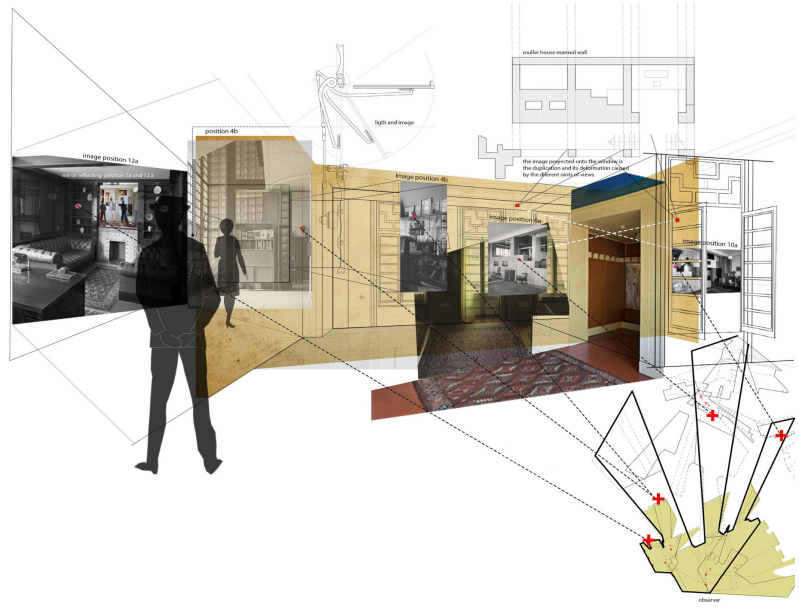


2.47 — Scenographic drawing #2. A view from main hall of Villa Müller is frontally intersected by three other vantage points: position A4, A11 and B9. The wall becomes in a sort of media wall, displaying images of other interiors. Sebastian Aedo.

24 Ibid.
25 Lacan, *The Four Fundamental Concepts of Psycho-Analysis*.
26 Ibid., p. 83.

are also the intersection of different material fragments of the houses. Therefore, we can now find a wall undermining the role of another wall. For example, in the original optical inscriptions the main hall wall in the Müller Villa contained the space of a scene that happened before it. In the hybrid, this wall now opens out at different trajectories and to different spaces, becoming a sort of media wall, its surface shared by multiple images. This image begins to suggest the insertion of the media screen into the domestic space, replacing the notion of the gaze by the agency of a camera and the Lacanian screen by the media screen. In fact, most of the images in this drawing emerge out from the existing widows, frustrating any attempt to see beyond them. However, unlike Rene Magritte's *The Human Condition*, where we are caught by the *trompe l'oeil* of the painting, here there is no deception, finding within its frame just the reversibility of the domestic interior.

In this sense, these drawings do not merely reveal an eye that falls victim of an unconscious priority organising the field of vision. In psychoanalysis there is a more fundamental process of production that Griselda Pollock calls 'exhumation'[27] — this means to excavate on the psyche being analysed, with the aim not only of exposing repressed feelings and traumatic experiences, but also of "working [on] through."[28] In the same way, these drawings are intended not just to expose the blind apparatus of the gaze, but to manipulate it so visuality within the domestic interior can be reconfigured, and its material consequences contemplated.

Hence, they are valuable not for identifying the existing visual relations, already described and discussed extensively by numerous authors, but for its reinsertion. By this I meant the gaze's feedback loop into the same system of representation that *screens* it, like photography or drawings (orthographic as much as perspectival systems of projection), and its further representation in physical models.

2.6.5. Extrusion and Projection

The Lacanian concept of the gaze and the screen seems at first sight an ahistorical model of vision, one that is intra and inter-subjective, operating in relation to the existence of Others and not through the function of a particular optical device.[29] Yet its effects expand beyond the subject's own psychic register. This trans-historical model of vision always intertwines with social practices, systems of representation and technological media. Here I am not suggesting that the operation of the scopic drive is adjusted, distorted or remains unaffected by its relationship with a specific medium, but rather that the drive seems always to operate through a medium, and thus it is possible to explore the tensions and frictions between one medium and the other. As if the process of 'excavation' of the representational surface operates as a media archaeological practice: recuperating the function of the scopic drive as another medium within it.

One example is Lacan's recurring practice of mapping the function of the scopic drive — and with it the manifestation of the gaze and the screen — onto the medium of painting. Or even his own metaphor of the gaze as a camera in which "I am photo-graphed"[30] as he says. In this regard, is possible to see how the concept of the gaze and the screen has been absorbed into different technological media where, through a metonymic process, the camera is identified with the gaze, and the media screen with that of the Lacanian *image/screen*.

For example, Margaret Iversen's reading of Barthes' concept of *punctum* finds an equivalent to Lacan's concept of the gaze.[31] For Barthes the *punctum* — in contrast to his concept of the *studium*, signifying the cultural code or organisation that is shared and makes something collectively legible — is closely associated with the viewer's *unconscious*. Barthes describes the *punctum* as: "This element which rises from the scene shoots out of it like an arrow, and pierces me."[32] For Barthes *punctum* is something that comes up from the surface of the photograph and "pricks me,"[33] and Iversen believes this 'something' is precisely the subject's

27 Griselda Pollock, "The Image in Psychoanalysis and the Archaeological Metaphor," in *Psychoanalysis and the Image : Transdisciplinary Perspectives on Subjectivity, Sexual Difference, and Aesthetics*, ed. Griselda Pollock (Malden, Mass.: Blackwell Pub., 2006).

28 Ibid.

29 Kaja Silverman, *The Threshold of the Visible World* (1996). Using Harun Farocki's film *Bilder der Welt und Inschrift des Krieger (Images of the World and the Inscription of War*, 1988), Silverman attempt to correct the 'historical relativism' of Jonathan Crary's book *Techniques of the Observer*, in which the camera (camera obscura) is studied in relation to specific discursive formation and material practices and omit, according to her, the trans-historical model of vision offered by Jacques Lacan.

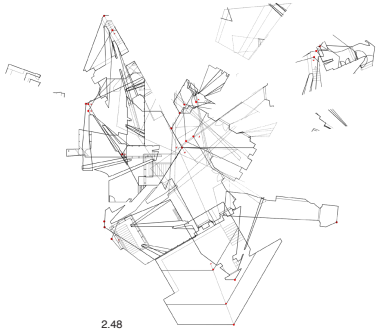
30 Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, p. 106.

31 Margaret Iversen, *Beyond Pleasure : Freud, Lacan, Barthes*, Refiguring Modernism (University Park, Pa.: Pennsylvania State University Press, 2007).

32 Roland Barthes, *Camera Lucida : Reflections on Photography* (London: Vintage, 1993), p. 26.

33 Ibid., p. 27.

2.48 — Floor plan drawing for the first extrusion area.
2.49 — physical model of the extruded area.
2.50 — physical model of the extruded area view from above.
2.51 — Floor plan drawing for the projected area.
2.52 — physical model of the extruded area.
2.53 — physical model of the extruded area view from above.



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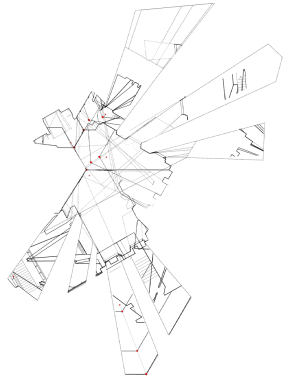

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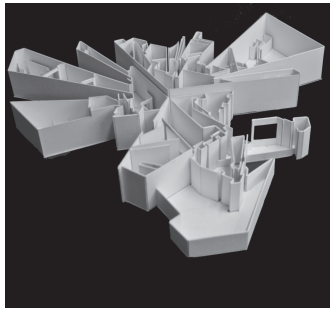

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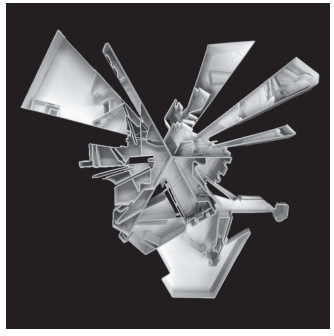

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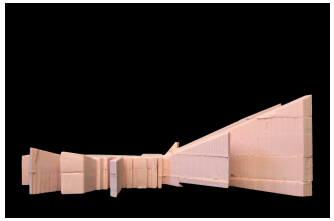

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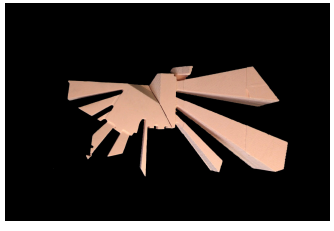


2.53

Drawing and physical models produced by the author.

own manifestation of his lack or desire, disrupting the lines of vision created by the photographic apparatus.[34] In film studies Laura Mulvey reads the Lacanian concept of the gaze as a male gaze, which is unconsciously embedded in the whole cinematic apparatus.[35] This gaze is, according to Mulvey, facilitated by the camera, which constructs certain 'looks' between the actors and between the actors and the screen, constantly placing the female character as the spectator's object of desire.

I would argue that the scopic drive suffers a process of remediation, where the operation of its circuit is not just mapped onto other mediums, but seems to simultaneously emerge from them, constantly rearticulating vision. In the following design stage this mapping is materialised and spatialized through the construction of physical models. Consequently, within the design method, the gaze suffers its own process of remediation: it is traced through photographic images, drawings and text, which are redrawn, rewritten and materialised through the physical models.

The intention behind this materialisation is to see how the different optical encounters — previously represented as windows, as images intersecting the field of vision — have begun to physically shape a new optical field and point towards the emergence of a new space. This, opens-up the possibility of remapping the gaze within this new structure, and visuality being rerouted again in an almost endless process of visual contingencies.

As a first exploration, the visual configuration of the exposed group, and the visual field it intersects, are vertically projected [fig. 2.48 - 2.50]. The model becomes an extrusion of the drawings, and only variations in the height of walls are represented. This first model causes several visual fields to be interrupted as one materialised wall enters the visual field of another. However, the geometry of the visual field, used during this whole process of mapping, is not taken into consideration. For this purpose, another model was produced to acknowledge the volumetric property of the visual encounter [fig. 2.51 - 2.53]. But again, this model only deals with the projection of the space and takes no account of the distortions caused by the intersection of several visual fields. It is through the third model that this issue is addressed.

2.6.6. Reconfiguration II

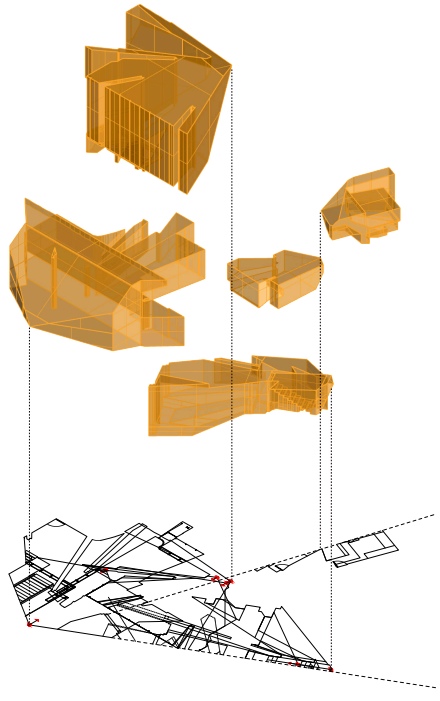
For this purpose, three-dimensional models of both Müller Villa, and Maison de Verre are created in Rhinoceros software. Within each one of them, the visual field coming from a vantage point is also made three-dimensional, shaped by all the 'obstacles' that it might find in its way, such as stairs, walls, furniture, shelves, doors, windows and so on. This process of placing a viewpoint in the space can be compared to Isovist analysis, a technique developed during the 1970s by urban and landscape designers that helped them to produce a prototype showing the visual perception of the space[36]. Even though modelling the visual cone inside the domestic space was not carried out through Isovist using software[37], it shares its fundamental principles in relation to how the visual field is represented three-dimensionally and shaped by its route.

Instead of an extrusion of the lines, as in the first physical model, this model involves new mapping which returns to the house. This time the mapping is performed through three-dimensional, rather than orthographic, representation of the interior [fig. 2.54]. Once the new visual fields have been constructed, they are relocated on the surface of the drawings, which at this stage take on the function of a plane of reference controlling the positioning of them. With this reinsertion, the organisation established by the drawings is reconfigured, the intersection of the fields of vision, now expressed in volume terms, results in complex volumetric assemblages [fig. 2.55 - 2.57].

By way of example, I will look at the perspectival arrangement being used at Palladio's Teatro Olimpico in Vicenza. Here, behind the *Scaenae frons*, a second area is constructed with a sloping floor, simulating a long street full of houses. The depth created by the scene is achieved using a strong perspective (at least one of which is intended to be seen from any angle by the audience)[38]. This image of a long street is made possible by the visual cone of the viewer working with one created by a fictitious eye[39] (the three vanishing points being located at the far end of the scene). Therefore, the *Scaenae frons* acts as a sort of buffer zone, a *screen* between the viewer's cone of vision and three perspectives artificially reproduced by the scene. The former is invisible and immaterial (imagined by the viewer); the latter is materialised (almost as volume) through the sloping and diminishing shape of the space.

In the physical models, both the viewer and the scene situations are materialised into volumes. However, their encounter is not mediated by a buffer zone, by what Lacan refers to as the *screen*. If in the scenographic drawings, the returning look appears to be at a distance as if framed within a window; here they intersect one another, as if no mediation were possible, and the screen between them were pierced. Any notion of a *here* and *there* is no longer possible, as one visual field is not separated from another.

But the resulting volume is not just the result of visual cones working together. A final process of recalibration takes place, in which both the vantage point (as the conscious eye in the scene) and the other viewpoints (as gazes), cut across each other [fig. 2.55]. This means the final volume (a fragment of the hybrid) is the materialisation of the optical intersection of their 'zone of contact'. Hence the final model is a series of layers, each having a different materiality and representation displaying its process of spatialisation of the gaze. Wooden boarding corresponds to the structure of the hybrid, acrylic sheeting to the new visual relations emerging from them, and the volumes to their new spatial configuration.



2.54 — Sequence of volumetric visual fields intersecting with each other. Sebastian Aedo.

34 Iversen.

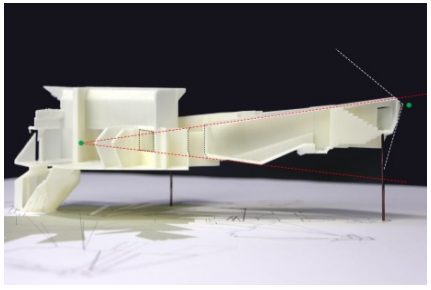
35 Laura Mulvey, *Visual Pleasure and Narrative Cinema* (1999).

36 Michael J. Ostwald, *The Mathematics of the Modernist Villa Architectural Analysis Using Space Syntax and Isovists*, ed. Michael J. Dawes, 1st ed. 2018.. ed. (Cham: Cham : Springer International Publishing : Imprint: Birkhäuser, 2018), p. 95.

37 It was done in Rhino tracing line by line the projection from a vantage point, connecting them in planes and then turning them into volumes on the computer screen.

38 Richard Leacroft and Helen Leacroft, *Theatre and Playhouse : An Illustrated Survey of Theatre Building from Ancient Greece to the Present Day* (London: Methuen, 1984), p. 89.

39 In Teatro Olimpico this eye is located at the end of the three different perspectival constructions.



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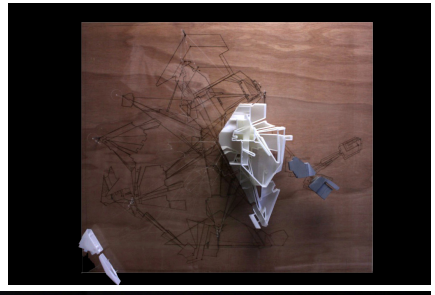

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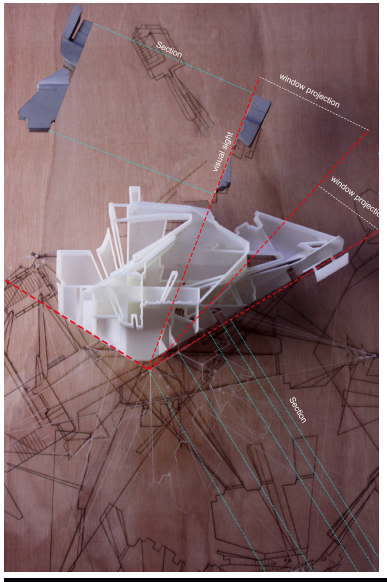

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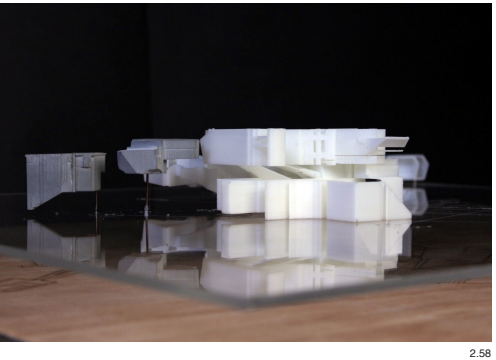

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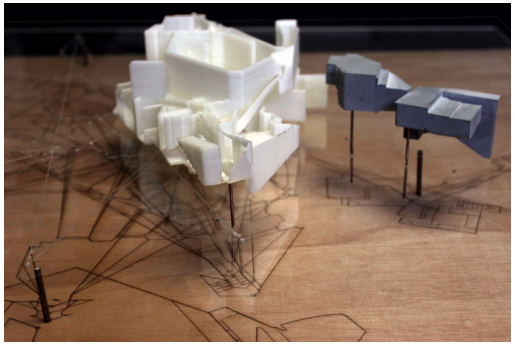

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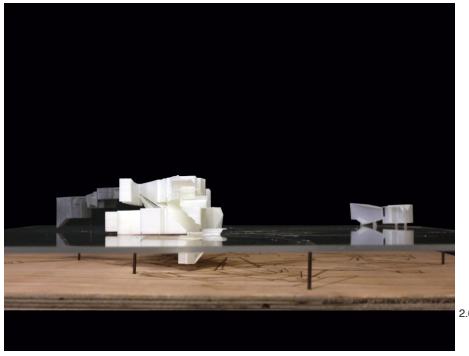

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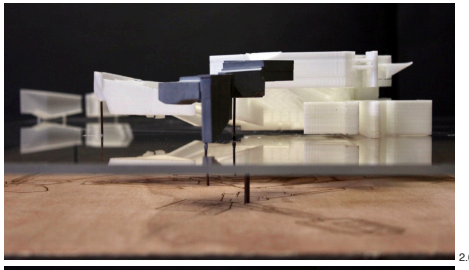

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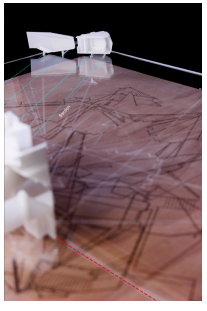

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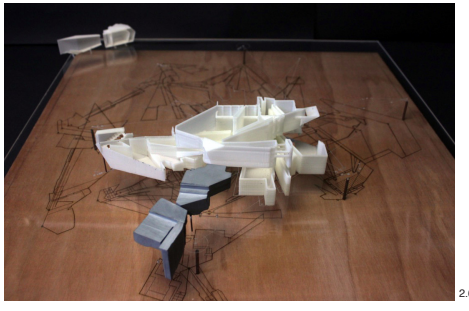


2.63

2.55 — both the vantage point (as the conscious eye in the scene) and the other viewpoints (as gazes), cut across each other.. Sebastian Aedo

2.56 to 2.64 — physical model of the extruded area. Sebastian Aedo.

Drawing and physical models produced by the author.

2.64

2.64 — Scenographic drawing #3. Villa Müller main hall laterally intersected by four other optical positions. Sebastian Aedo.

2.65

2.65 — Scenographic drawing #4. Maison de Verre's boudoir. The view is interrupted by the intersection of three other visual fields.

III

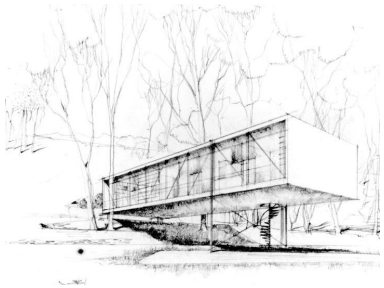
3.1 Screening *House*: Film and Material Representation of the Cold War's Anxieties

In Charles and Ray Eames' case study house #8 the screen is performed in several ways. On the one hand, we can talk about a certain aesthetic that — through its materiality (most of it steel and glass panels) — frames and reflects the views of the surrounding landscape. This action merges on its surfaces images of the exterior with the interior, a sort of protective shell that is camouflaged in the landscape. On the other hand, we can discuss what this aesthetic and its representations on the screen — in the film *House: After Five Years of Living* — suggest. There is an image that the house tries to promote: the house as an extraordinary example of how the shortage of middle-class houses — driven by the end of the War — can be tackled; but also, how the incredible amount of knowledge and technology gained during those years of war can be applied to the domestic market. However, these preoccupations are not deployed within a neutral environment. New anxieties and preoccupations emerging from the Cold War conflict came to shape the context in which the Case Study House programme was developed. Under such circumstances, Charles and Ray Eames' Case Study House #8 and its film emerge as an ideological promotion that responds to a cultural, economic and social context that is simultaneously used and concealed within its aesthetic and modes of representation. Like a screen, the Case Study House #8 exposes and covers, promotes and disguises, veiling some preoccupations and motivations, while exhibiting an alternative reality.

In 1945 the magazine *Art & Architecture* organised the Case Study House Programme, aiming to supply an answer to the new living problem at the end of World War Two. This new scenario was characterised by social and economic changes where new techniques, distribution of new materials were expanding the definition of what a house is.[1] In the announcement of the programme, the publication declared:

> What man has learned about himself in the last five years will, we are sure, express itself in the way in which he will want to be housed in the future. Only one thing will stop the realisation of that wish and that is the tenacity with which man clings to old forms because he does not yet understand the new[2].

Two conditions defined this new environment: the technological development and skilled labour gained during the war, and the urgency to build new houses to receive the veterans returning from the conflict. In an article written six months earlier the magazine had already raised this concern, calling for the use of new building techniques as the only solution available to relieve the housing shortage in the U.S. left by the end of the war.[3]



3.1

3.1 —Original desig for the "Case Study House 8 and 9," Charles Eames and Eero Saarinen, *Art and Architecture*, no. December (1945).

Aligning the proposition and promotion of a new type of domesticity with the U.S. political agenda,[4] the programme put into practice the new technologies and materials available in the market for the construction of twenty-four houses. According to the publication the magazine would be the client, and the architects the designers who would deploy these new techniques and materials available (even though they were not obliged to do so). In this context, the Case Study House #8 — designed by Charles and Ray Eames — was not only planned with the purpose of demonstrating how military technology could be recycled and applied to the domestic market; but also how domesticity can be unfolded within the kind of structure that had been used for the construction of barracks and hangars during the war.[5]

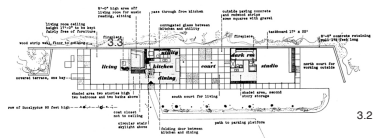
The Eameses' house — designed in a plot acquired by the editor of the magazine, John Entenza, in the Pacific Palisades closed to Los Angeles — is comprised of a house and a workshop: a long volume formed by two trusses spanning over the small hill of the site, each supported on the ground by two steel columns [fig. 3.1]. In the first number of the magazine in which the design was published,[6] the Eames described the house as a "shock absorber"[7] and as a "re-orientator for the life in work."[8] Its spaces were not just designed for a new living standard, but also re-thought as a productive centre. As Charles Eames and Eero Saarinen explain:

> The whole solution proceeded from an attempt to use space in direct relation to the personal and professional needs of the individuals revolving around and within the living units in as much as the greater part of the work or preparation for work will originate here…'House' in these cases means centre of productive activities.[9]

This idea is reinforced by the workshop at the back of the house. According to the publication both the house and the workshop, are designed for a married couple, professionals with mutual interests, where life and work are merged.[10] It is not until the third publication[11] where the Eameses changed the design of the house. Due to a delay in the delivery of the steel and an increase in its price, Charles thought to enclose more space with the same amount of steel to justify its cost.[12] With more time to re-think the original proposal, the Eameses decided to rotate the whole structure and place it along the eucalyptus trees – the house was now camouflaged within the site, the trees covering the glass panels and filtering the interior and exterior views [fig. 3.2 and 3.3]. However, this change did not result in any alterations to the budget and to the steel sections ordered in the original design.

Perhaps one of the biggest challenges was not just technical but aesthetic. How to turn the technology and aesthetic recalling the design of wartime hangars and barracks into a modern conception of domesticity? When one reads Charles' description of the house, it is as if the house, were constantly struggling between its industrial presence and the way this presence was concealed by the landscape or by the domestic environment inside. In one of the articles in *Art & Architecture*, Charles expressed his satisfaction with the patterns and textures created by these materials: "Case Study wise, it is interesting to consider how the rigidity of the system was responsible for the free use of the space and to see how the most matter-of-fact structure resulted in pattern and texture."[13]

The way in which the house is inserted in the landscape, and the deployment of the domestic artefacts disguising the structure of its interior, gives the impression that the house is playing a constant game of revelation and concealment [fig. 3.4]. This idea can be seen in the reflection of the trees upon the glass panels,[14] the house is like a surface camouflaged in its environment. This camouflage however, is not only exterior but also interior, as Charles Eames and Eero Saarinen explain in its first proposal in *Art & Architecture*: "The house must make not insistent demands for itself, but rather aid as a background for the life in work."[15] The house — its structure — is described as a prompt for the unfolding of domestic space – a prompt that is dressed up and disguised.[16]



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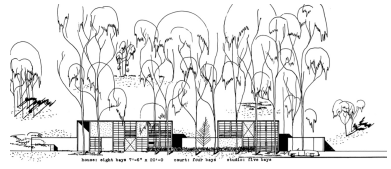


3.3

3.2 — Charles and Ray Eames Case. Floor plan, Case study house #8. Published in *Art & Architecture*, December 1949.

3.3 — Charles and Ray Eames. Elevation, Case study house #8. Published in *Art & Architecture*, December 1949.December 1949.

3.4 — Case study house #8. Reflections of the landscape in one of its widnows.

3.4

3.1.1. The House as Territory: Domesticity Beyond its Walls

In 1955, the Eameses gathered more than 300 photographs taken during the first five years they lived in the house. The aim was the production of a film called: *House: After Five Years of Living*. The film — accompanied by the music of Elmer Bernstein — showed pictures of the house and their studio, where exterior and interior images were combined with elements from nature and personal objects of the couple. The film — an unusual production of motion picture film of the photographs — follows a route that starts from the outside and navigates through the main spaces of the house and the workshop. The disclosure of a domestic space in a motion film production, was already used by Le Corbusier in the 1930 film *L'Architecture d'Aujourd'hui* in which the *Villa à Garches* is displayed through a series of traces left by the architect. For Beatriz Colomina, in Le Corbusier's film, we seem to embody — through the camera displacement — the role of a detective following the route of an intruder: what we see is a voyeuristic look of the house.[17] However, in *House: After Five Years of Living*,

1 Jhon Enteza, "Announcement," *Art & Architecture*, no. January (1945).
2 Ibid., p. 39.
3 "What Is a House?," ibid., no. July (1944).
4 Peter Blundell Jones and Eamonn Canniffe, *Modern Architecture through Case Studies, 1945-1990*, First edition. ed. (Amsterdam ; Boston ; London: Elsevier/Architectural Press, 2007).
5 Daniel Esguevillas, *La Casa Californiana : Experiencias Domesticas De Posguerra*.
6 Charles Eames and Eero Saarinen, "Case Study House 8 and 9," *Art and Architecture*, no. December (1945).
7 Ibid., p. 44.
8 Ibid.
9 Ibid., p. 43-51.
10 Ibid.
11 "Case Study House for 1949: The Plan," *Art and Architecture,* no. May (1949).
12 Pat Kirkham, "Introducing Ray Eames " *Furniture History* 26 (1990).
13 Charles Eames, "Case Study House for 1949, Designed by Charles Eames *Art & Architecture*, no. December 1949 (1949).
14 Beatriz Colomina, "Reflexiones Sobre La Casa Eames," *RA: Revista de Arquitectura* 9 (2007).
15 Eames and Saarinen.
16 "Life in a Chinese Kite," *Architectural Forum* September (1950).
17 Beatriz Colomina, *Privacy and Publicity : Modern Architecture as Mass Media* (Cambridge, Mass. ; London: MIT Press, 1994).

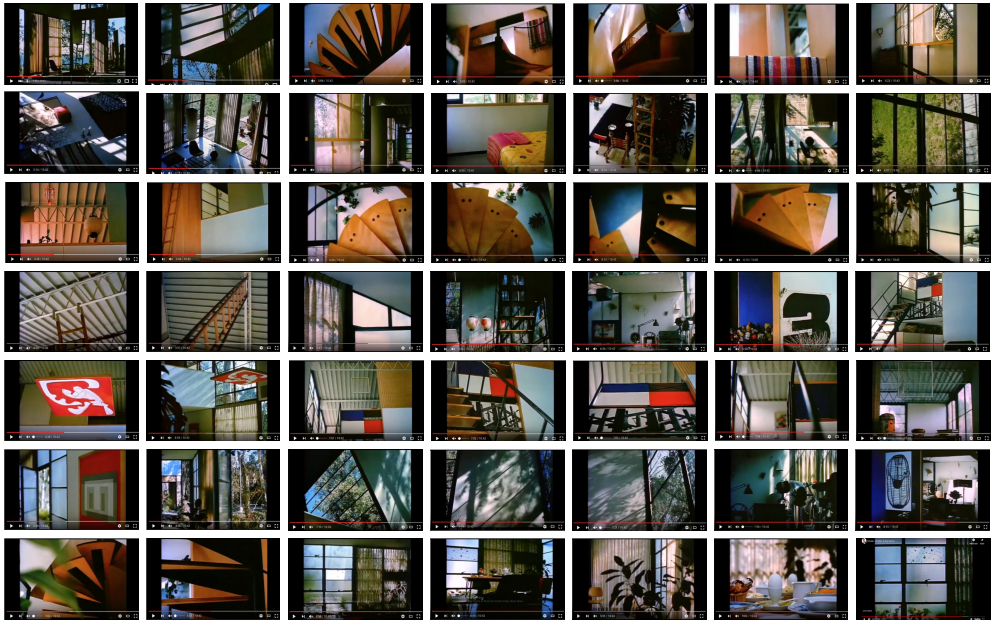
there is no human presence and no camera movement, instead, we circulate inside through a series of slides which combines two film editing techniques. One of them is 'fast-cut' (successive shots of a brief duration), and the other 'dissolves' (one image dissolves into the following one in a slow transition). In the film, the images of the house are merged with images of their domestic life — small figures, pieces of their work in progress, decorative objects, crockery sets — among small elements from nature, all resized to the dimension of the screen.

The film begins with an axonometric animation of the house where all its elements are re-assembled as a meccano-like structure. Once the house is completed, the camera starts to display the landscape in which the house sits. The small shaking in the image implies that the film was recorded with a handheld camera, such that the hand movements are impressed upon the image. What is interesting about this is that the camera was not actually recording the space, but rather colour slides taken during those five years — showing in the film the convergence of multiple temporalities. In the film, the house first appears in fragments. The first image is a close-up of a tree trunk where the glass panels are located behind. The house appears first too close then too far, its position behind the eucalyptus trees making it difficult to portray entirely in a single frame. The exterior images are fragments of the house reflecting the trees, flowers and plants, but also fragments re-framed by these same elements of the exterior. It is as if the house were an inseparable element of the landscape, taking part of it but also reproducing it in its reflection: the house appears camouflaged in it.

The façade — a steel structure composed of glass, stucco and cemesto boards — mimics the landscape through different projections and reflections. During daylight, the glass panels create a series of reflections that are exacerbated in the film depending on the camera position. Sometime these reflections produce a kind of mirror-like effect where images of the exterior are flipped onto the surface of the glass, merging them with images of the interior, an assemblage of outside and inside. At the same time the cemesto boards act as a surface on which the trees' silhouettes are projected by the light of the sun.

In *House: After Five Years of Living*, the house moves between moments of recognition and absence, almost as if — through the camera — playing a game of hide-and-seek [fig. 3.5].

3.5



3.5 — Snapshots from the film *House: After Five Years of Living* (1949). Charles and Ray Eames.

These moments of absence replace the view of the house with small details, objects and fragments of the landscape; there is a conflict between the representation of the space and its objects, between the container and what is contained. The intense close-ups seem to scrutinise the space instead of just presenting it, but what does the camera show us and what is it trying to discover? Maybe there is a frenetic search for the domestic; in the objects, the architecture, the landscape and its reflection. Domesticity seems to be a new environment that desperately seeks to be domesticated, recognised and controlled. In the film, we witness the large and the small; through the lens of the camera our position is mediated and the size of things are relative to this position. The small becomes the large and the large becomes the small, in a game that seems to reproduce Gulliver's travels in a fragmented sequence. On the screen things grow and shrink and the human body is no longer a scale of reference for this new dimension — and perhaps this is the reason why there is no human figure in the film. Looking at these images, the film seems to suggest two paradoxical positions. The first one is the notion of the interior as an environment that can be possessed and controlled, that can be manipulated and of course, domesticated. This idea is reinforced precisely by the 'dissolves' technique, which slow down the rhythm of the sequence, allowing to maintain certain focus on the images. The other position is caused by the 'fast-cut' technique, which accelerates the sequence to a point at which it is hard to maintains the attention. This kind of sequence, which is predominant in the film, takes the viewer to a kind of perceptive threshold where the presence of the image seems at times to slip towards an unconscious retention. Therefore, these two contrasting positions suggest a space in a state of conflict, an interior struggling for control.

It is not that the camera creates this new domestic landscape; rather, it seems to reinforces it. These were the years in which the politics of containment were deployed.[18] To survive in a Cold War era was to contain the external threats. Purportedly, the influence of the Soviet Union would be limited to specific zones; the nuclear technology can be controlled for pacific purposes and communist influences must be repressed (or contained) to secure political stability. The politics of containment was not only applied on a territorial level, but was also brought into the house where the threats of the Cold War could be tamed through family and political values[19] — reconfiguring in return the very significance of the domestic space.

Alongside the penetration (or perception) of external dangers into the domestic environment — and almost as a mirror projection — the new domesticity expands its field of influence to a territorial scale, beyond the suburbs and the urban, towards other nations where it was used to tame western countries under the U.S. political agenda. Domesticity is not at home anymore; it has been projected like an image on a screen toward other spheres; to the political, economic and military terrain. Multiple exhibitions in European nations were used to advertise American values through domesticity, as a soft power promoting American corporate capitalism against the communist system of Soviet nations. *America At Home* (West Berlin, 1950*)* for example, placed a pre-fabricated house where German visitors could watch female students vacuuming, preparing toast and using diverse types of appliances that makes the life of the homemaker easier [fig. 3.6].[20] Similarly in Berlin, *We are Building a Better Life* (1952), a typical American suburban house was displayed with diverse types of domestic items labelled with the amount of working hours needed to purchase them instead of producing them [fig.3.7]. Others exhibitions like *Peoples' Capitalism* (Poland, 1956), *Supermarket USA* (Zagreb, 1956) or *The American National Exhibition* (Moscow, 1959), all circulate around the idea of the suburban house — together with the display of consumer goods and the family values they promote — as symbols of American hegemony. In this sense, the domestic became the new battlefield.[21]

Within such situations, the cinema screen emerges as an important mediator between reality and its representation. This was the time in which Hollywood produced films depicting the life of the returning soldier[22], but also the new environment and anxieties of a nuclear conflict. They began to portray the suburban dwelling and the nuclear family that inhabited them – but in its representation, they were also constructing their own interpretation of the conflict based on their own ideologies and political agendas. Although experimental, the film *House: After Five Years of Living* can be seen as related to these transformations triggered by the conflict — new domestic values, aesthetic representation, gender roles, the penetration of consumer goods and new information technologies. The world's military instability has been transplanted into the domestic environment, where the paranoia of the communist threat permeates its walls. The house is a world in itself that needs to be examined, surveyed and controlled.

3.1.2. The Fleeting Image; or the Visual Overload as a Cognitive Exploration

In *House: After Five Years of Living*, there is a rapid sequence of images where the position of a stable viewer is disturbed by the juxtaposition of different perspectives of the house — not only the scale of their parts is manipulated on the screen, but also it is shown from difficult angles. Inside the house, the floor, the walls and the ceiling are treated as equal planes.[23] The way in which some of the objects are framed by the camera — such as rugs, tables, trays, paintings and glass panels — gives the impression of planes which are constantly juxtaposed. In the film, this situation is intensified by the angle of the camera: a piece of the ceiling can be either a piece of a floor or a wall. The camera alters the orientation of planes inside the house and thus, destabilizes the position of a human body. These perspectives unsettle any stable reference in the space and the eyes of the viewer lose their ground. In the film, the camera replaces the human eye with one that can experience a diversity of perspectives in an accelerated sequence of images. In this representation of the interior – through shifts in scale, the editing out of human figures, peculiarities of framing, and the fast-cut technique – the camera delivers an uncanny manifestation.

In the film, the camera seems to bounce from one place to another rather than moving throughout — we are not passive observers of the space, but active viewers scrutinising and analysing what we see. This scanning mode takes the form of glimpses that move inside the house, hovering in the space and detached from the human body. There is a displacement of the human eye in favour of a mechanical one: the camera. This mechanical eye — as a suspended vision freed from the constrains of the human body — recalls Dziga Vertov's work, a Soviet filmmaker who promoted a sensory exploration of the world through film[24] (cinema *vérité*) in contrast to its theatrical manifestation. For Vertov, the whole process of editing (montage)[25], is sustained by the liberation provided by the camera, which was considered by the Kinoks (the group of filmmakers around Dziga Vertov) the new eye, a perfected organ of sight that could register hitherto, unperceived phenomena of the world[26]. For them, the

3.6 — *America At Home* (West Berlin, 1950). A host shows a television set.

3.7 — *We are Building a Better Life* (Berlin, 1952). A typical American suburban house was displayed with diverse types of domestic items labelled with the amount of working hours needed to purchase them instead of producing them.

3.6

3.7

18 Elaine Tyler May, *Homeward Bound : American Families in the Cold War Era* (New York: New York : Basic Books, 1988).

19 Ibid.

20 Greg Castillo, *Cold War on the Home Front : The Soft Power of Midcentury Design* (Minneapolis: University of Minnesota Press, 2010). Spiro Kostof and Greg Castillo, *The City Assembled : The Elements of Urban Form through History* (New York, NY: Thames & Hudson, 2005).

21 Beatriz Colomina, "The Lawn at War: 1941-1961," in *The American Lawn*, ed. Georges Teyssot (New York: Princeton Architectural Press with Canadian Centre for Architecture, Montréal, 1999).

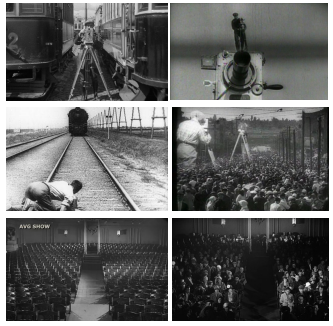
22 Among them is *The Best Year of Our Lives* from 1946, which was one of the first films depicting the traumas occasioned by the War. The film portrayed the life of three solders; a pilot, an infantryman, and a sailor; and their difficulties to return to civil life.

23 Colomina, "Reflexiones Sobre La Casa Eames."

24 Dziga Vertov and Annette Michelson, *Kino-Eye : The Writings of Dziga Vertov* (London: Pluto, 1984).

25 For Russian filmmakers, montage refers to both words in English, montage and editing.

26 Vertov and Michelson.



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3.8 — Snapshots from the film *Man with a Movie Camera* (1929). Director: Dziga Vertov

3.9 — Snapshots from the film *The Day of the Dead (1957).* Director: Charles and Ray Eames. One of the films that explored the delivery of a huge amount of information.

camera moves in time and space, detached from the human body, displaying not only details impossible to see but also — through the editing process — able to construct a new reality.

For Vertov, montage is not only a relationship aroused by a sequence of images, rather a strategy that permeates all the stages of the film. His film *Man with a Movie Camera* (1929), functions as a metanarrative — a film about itself — that places cinema as a cognitive activity able to produce knowledge, but also to disturb human perception.[27] The film, breaks down in multiple visual trajectories; it is not so much about a specific narration — a day in the life of Soviet city — but more about its process of production in which, we as spectators, are also part of it. Thus, for Vertov montage is also a work of deconstruction, where the audience is displaced from its role as passive observers to be participants in the process of production [fig.3.8].[28]

Although in many of the Eameses' films the audience also takes an active role, they are approached differently: through the delivery of a huge amount of information in the form of still images in a rapid sequence described by the American film director Paul Schrader as "information-overload"[29] — testing the observer's capacity for retention, recollection and associations that can emerge from the sequence. This was the case in many of their films and multiscreen presentations such as *Two Baroque Churches* (with 296 still shots, almost one every two seconds)[30], The *Day of the Dead* (1957) [fig.3.9], *Glimpses of the U.S.A* (1959), and *Think* for the IBM pavilion at the 1964-1965 New York Fair. One of the Eameses preoccupations was the constant exploration of the subject's capacity to handle visual information. In *House: After Five Years of Living*, the duration of each image on the screen — sometimes less than one second — implies that the emphasis was not intended to be found in the single image but in the construction arising from the almost unconscious accumulation of them, thus creating a constant tension between the sequence (the succession of shots) and its temporal rhythm. Some of Charles and Ray Eameses' films, and this one in particular, are characterised by an absence of narrative. Montage in *House: After Five Years of Livin*g is not about building a specific story but about a visual re-construction of the house, one in which the rapid succession of images on the screen implies a level of retention which is highly subjective. This means a retention that depends on the subject's capacity to remember the images. The viewer must apprehend the information and construct their own interpretations — taking the observer to a perceptual threshold.

These kinds of practices were not uncommon in the military terrain. Paul Virilio points out how, during WWII, the constant search for camouflage and concealment from the enemy led to the development of new tools and technologies able to see beyond the camouflaged landscape.[31] In such situations, human vision was challenged and new devices and technologies came to expand it or even replace it. These new devices were developed as an increase in the capacities of human vision in an environment affected by the amount of information available that had to be processed. This required a trained eye able to decipher the instruments and the ever-changing amount of data.[32] Technology was developed to conceal the presence before the enemy, but also to uncover it.[33] As Virilio writes:

> The problem, then, is no longer so much one of masks and screens, of camouflage designed to hinder long-range targeting; rather, it is a problem of ubiquitousness, of handling simultaneous data in a global but unstable environment where the image (photographic or cinematic) is the most concentrated, but also the most stable, form of information.[34]

In this war environment, psychological challenges arose around the complex interaction between man and machine. The fatigue and lack of attention of the radar operator, for example, posed a serious problem for a person that must be in a constant state of alertness, scanning the always changing radar screen. Numerous experiments and reports testing the capacity of attention, reaction, and the rate of recovery of the soldier[35] were produced in an environment highly influenced by the speed of information transmission.[36] Among them, are the studies of visual and auditory monitoring carried out by the British psychologist Norman Mackworth, or the ones

27 Judith Mayne, "Eisenstein, Vertov, and the Montage Principle," *Minnesota Review* 5, no. 1 (1975).

28 Ibid.

29 Paul Schrader, "Poetry of Ideas: The Film of Charles Eames," *Film Quarterly* 23, no. 3 (1970).

30 Ibid., p. 10.

31 Paul Virilio, *War and Cinema : The Logistics of Perception* (London ; New York: Verso, 1989).

32 Orit Halpern, "Perceptual Machines: Communication, Archiving, and Vision in Post-War American Design," *Journal of Visual Culture* 11, no. 3 (2012).

33 Virilio.

34 Ibid., p. 72.

35 L. S. Hearnshaw, *The Shaping of Modern Psychology* (London: Routledge & Kegan Paul, 1987), p. 206.

36 Ibid.

produced by the American psychologist James J. Gibson, who — through the use of filmic material — conducted visual experiments for the "AAF Training Command". In his research, using different film techniques, pilots had to learn to discriminate valuable information in an unstable environment as an important skill for survival[37]. The capacity to acknowledge their own position in space through the scanning of their environment was meant to be learnt, and incorporated into the reactions of the pilot through visual training.[38] For Gibson, film had the advantage of providing pilots with a very accurate simulation of movement, sequence, pacing, and realism[39] – however, film was not only intended to simulate an environment, but also to advance the learning of habits, the capacity to improve decision-making, and memory span[40].

These kind of visual experiments were soon translated from the battlefield to other areas of research by architects and designers like the Hungarian-born artist György Kepes, the industrial designer George Nelson, and the Eameses. Through new modes of presentation techniques and learning processes, this group of professionals, aimed to train the eye of an observer in an informational environment that needed to be decoded and interpreted. In this sense, film was used as an exploration tool in which visual fragments were intended to be converted — via an observer, and through a cognitive process — into thought; vision was rendered the main aspect of cognition.

In 1952 Charles and Ray Eames, George Nelson and Alexander Girard organised the course *A Rough Sketch for a Sample Lesson for a Hypothetical Course*. The purpose of this course — commissioned first by the University of Georgia Art Programme, and developed later by the Engineering School at the UCLA — was to dissolve the boundaries between different disciplines, testing new learning techniques that delivered the highest amount of information to the audience in the minimum time possible.[41] The Eames, Nelson and Girard developed a complex system of presentation in which film was complemented by other types of information, such as narration, slides, graphic panels, music and even smells [fig. 3.10].[42]

A Rough Sketch for a Sample Lesson for a Hypothetical Course was an experiment involving perception, in which the audience was flooded with apparently unconnected types of information and exposed to different modes of communication. By so doing, the programme explored new ways to increase the subject's optical ability, giving the observers the capacity to create and build their own connections. In this experiment, the time of exposure of each image, as well as its position on the screen (its place in relation to other images), were two of the main considerations that would shape the subject's capacity to remember and build some of his own relations.[43] As part of significant transformations in the field of communication after the war, these kinds of experiments involving human perception were not exclusive to the Eameses' own work, but also permeated the study of other designers like Kepes[44]. For Kepes — who would later found The Center for Advanced Visual Studies at the MIT — there was a new 'language of vision' that was mobile and autonomous, the product of an abundant flow of data.[45] In this new landscape, the subject must trust in a variety of instruments, devices and formulae delivering different types of information simultaneously. The problem was no longer one of archiving the information, but one of processing it.[46] Techniques of camouflage used for training the soldier during the war now oriented the training of the designer and the businessman.[47]

A year after their course at the University of Georgia, the Eameses translated the experience of *A Rough Sketch for a Sample Lesson for a Hypothetical Course* into the film called *Communication Primer* (1953) [fig. 3.11]. This, addressed to architects and city planners, introduced Claude Shannon's theory of communication to encourage effective methods in city planning and design. As Charles explained:

> This primer was the outcome of a feeling that processes based on information theory must be an essential component of city planning. One cannot anticipate a strategy that will meet an increase in population or social changes unless one has a way of handling enormous amounts of technical information.[48]

This information overload[49] is used in *House: After Five Years of Living*. In the film, the rapid succession of images on the screen makes difficult the retention of the complete information – which is to say, to remember the images, the sequence and the movements of the camera inside the house. It is difficult to acknowledge the position of the camera or which part of the house is being exposed on the screen. The house collapses (loses its sense of unity) through the multiple images fragmenting it into short periods of exposure. However, information overload, was not meant to confuse the viewer but rather to allow new associations to be developed in relation to what was displayed.[50] For Charles, the main purpose of this technique was to find the correct way for channelling the information. As he explained:

> In certain cases you don't mind that, if the thing has unity. Someone can switch goals and still do a good thing. But there are grey areas: shows may take on the trappings of information but not be really informative. These are the things that are disturbing. When the information is not the goal, you often get an arbitrary cutting from image to image. In planning the Moscow show we tried our varied tricks and rhythms in changing the images. We discovered that if you had seven images and changed one of them, this put an enormously wasteful, noninformative burden on the brain, because with every change, the eye had to check every image to see which one had changed. When you are busy checking, you don't absorb information. Franticness of cutting tends to degenerate the information quality.[51]

However, these were experimental practices in which the subject was taken to a perceptual threshold, thus allowing the possibility for confusion and disorientation. These types of practices must be understood alongside an emergent information economy in the U.S. that — through the new technology of the computer — were transforming not only the way in which business was done, but how information was gathered, organised and used. While the human subject was trained to produce thought out of visual fragments, computational machines begun to store, decipher and transmit a huge amount of data, as part of this new information environment. Humans and machines were promoted as equals in an attempt to domesticate both computer and user.[52] This attempt, was carried out more evidently by IBM, one of the biggest corporations in the U.S at the time.

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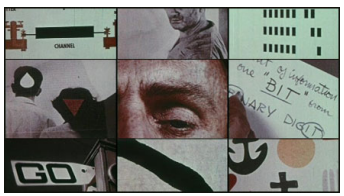


3.11

3.10 — Second presentation of *A Rough Sketch for a Sample Lesson for a Hypothetical Course*. University of Los Angeles, California, May 1953.

3.11 — Snapshot from the film *Communication Primer (1953)*.

3.1.3 The

37 James J. Gibson and Leonard Carmichael, *The Perception of the Visual World* (Boston: Houghton, Mifflin, 1950).

38 Ibid.

39 James J Gibson, "Motion Picture Testing and Research," (Army Air Forces Washington DC Aviation Psychology Program, 1947), p. 10.

40 Ibid.

41 Charles Eames, "Language of Vision: The Nuts and Bolts," *Bulletin of the American Academy of Arts and Sciences* 28, no. 1 (1974).

42 Eric Schuldenfrei, *The Films of Charles and Ray Eames : A Universal Sense of Expectation*, Routledge Research in Architecture (London ; New York: Routledge, Taylor & Francis Group, 2015).

43 Orit Halpern, *Beautiful Data : A History of Vision and Reason since 1945*, Experimental Futures (Durham: Duke University Press, 2014).

44 Ibid.

45 Ibid.

46 Ibid.

47 Ibid.

48 Eames, "Language of Vision: The Nuts and Bolts," p. 14.

49 Schrader.

50 Beatriz Colomina, "Enclosed by Images: The Eameses' Multimedia Architecture," *Grey Room* (2001).

51 Owen Gingerich and Charles Eames, "A Conversation with Charles Eames," *The American Scholar* 46, no. 3 (1977).

52 John Harwood, *The Interface: Ibm and the Transformation of Corporate Design, 1945–1976* (U of Minnesota Press, 2011).

3.1.3 Eameses and the IBM Domestication of the Computer Machine

Taking research derived from human science, information science and technical engineering[53], a team of professionals led by the industrial designer Eliot Noyes not only redesigned IBM's corporate image but soon became responsible for the design guidelines applied to their different products — something that Noyes called the "external of the machine — its interface."[54] This space is defined as the place of encounter between human being and machine, the place of interaction that is not just physical but visual.[55] Impelled by the context of the second World War, the development of computational machines was not only intended to decipher cryptographic codes, but in doing so, it opened a new way of seeing and foreseeing.[56] This was the case, for example, of *Colossus*, a computer machine designed by the British engineer Thomas Flowers able to break-down cryptographic codes, thereby exposing the movements of German troops on the battlefield. Another computer machine was the *Norden Bombsight*, (an anti-aircraft targeting calculator) developed by the U.S Army to predict the bomb's impact on moving targets. The advances in computational technologies developed during the war were applied to new modes of inscription, storage and information processing for civilian purposes in the context of the post-war corporate economy in the US. In 1956, and as part of the design programme launched by IBM, Eliot Noyes worked on a consistent process of re-design that sought to 'domesticate' the computer, inserting it within the office space and to enhance, toward this end, the interaction of humans with the machine.

In this regard, one of Noyes' first decisions was to expose the internal circuits of computer. Thus, the IBM 705 III model, and later the subsequent version called RAMAC — exhibited alongside the Eameses' film *Glimpses of the USA* at the United States' pavilion at the Moscow fair in 1956 — were built behind a glass surface. Moreover, RAMAC, was soon compared by Noyes with a Mies van der Rohe house. As he wrote: "[RAMAC] should not be like a ranch house. They should be like a Mies house. They should have that much integrity and joy."[57] The computer is conceived as a domestic interior, one that is transparent. Like the Eameses' house, the new computational machine merged interior and the exterior upon a single glass surface. The conception of the machine, as John Harwood notes, reflects the ideas of the computer as an essential component of the space in which is situated. This process of domestication of the computer, was not just limited to its design and mode of operation, but — as John Harwood proposes — to a process of "naturalisation"[58] that attempted to render the functioning of the computer more understandable, more friendly and less threatening to a broader audience of consumers.

This idea was exploited consistently through a series of fairs and traveling exhibitions in which the Eameses played a significant role, mostly in the production of educational films. In 1958, the Eames office produced the film *Information machine; Creative Man and the Data Processor* to be presented at the IBM pavilion at the Brussels Worlds' Fair that same year. The film — a caricature animation — introduced the functioning of the computer machine as the teleological response to the ways in which information has been processed throughout history.[59] In one of the sequences, the film shows humans (called 'artist' in the film), beginning to gather information from their environment in order to transform it into knowledge when it was required [fig.3.12]. Notably in this sequence the process is animated by a visual repository of objects collected by the 'artist', who transforms everything he sees into single images (pictograms depicted in the film in the form of memory card stored in his head). When it comes to the time to use that information, the film zooms-in on the artist's head where all the pictograms previously gathered are scanned and displayed in a fast-cut technique (as in *House: After Five Years of Living*). These images are then correlated, juxtaposed and even overlapped as a process of human thought that creates knowledge [fig. 3.13].

In the film *Information machine,* knowledge (and design as a process of thought) arises out of the strange synergy that places the subject at the intersection of the different media devices. Thus, photography visually records the elements of the environment; film, scans the photographs and combines them to create new associations; and the computer organises the images as a memory bank inside the 'artist's' head — processing them just as computer machines process the information encoded in punched cards. Seeing this film is like seeing a visual representation of Friedrich Kittler's dictum: "we knew nothing about of our senses until media provided models and metaphors."[60]

53 Ibid.
54 Ibid., p. 61.
55 Ibid., p. 65.
56 Ibid., p. 66.
57 Ibid.
58 Ibid.
59 Charles Eames and Ray Eames, "Information Machine; Creative Man and the Data Processor " (1957).
60 Friedrich A. Kittler and Anthony Enns, *Optical Media : Berlin Lectures 1999* (Cambridge: Polity, 2009), p. 34.

3.12 — Snapshot from the film *Information machine;* (1958). Visual gathering of information. Charles and Ray Eames.

3.13 — Snapshot from the film *Information machine;* (1958). process of mental recolection. Charles and Ray Eames.

3.12

3.13

Other films produced by the Eameses, like *An Introduction to Feedback* (1960), or *A Computer Glossary or, Coming to Terms with the Data Processing Machine* (1968), displayed the constant tension and similarities between human subjectivity and the agency of the computer. Hence, *Introduction* presents the concept of feedback — "the cycle of measuring, evaluating and correcting"[61] — as a condition shared by both, humans and machines. In one section of the film, the term feedback is described not only as the conditions involved in decision-making but, in the case of humans, is extended to the biological systems that regulate the human body (the feedback system loop known as homeostasis). But while human subjects are presented as equivalent to machines, the latter are also introduced as faster and more efficient.

In *A Computer Glossary,* computer terminologies are simplified and explained following a cartoon-like animation. In the film, Boolean logic — the algebraic form in which computers approach problem-solving through the binary numbering system[62] — is paralleled in the way that a common office worker must constantly decide between 'yes' or 'no' choices during his morning routine. However, in explaining the effectiveness and operation of the computer machine, the film shows in slow motion how, in the time it takes spilled coffee to reach the floor (half of a second), a computer could:

> Debt two thousand checks to three hundred different bank accounts; and examine the electrocardiograms of one hundred patients and alert a physician to possible trouble; and score one hundred fifty thousand answers of three thousand examinations; and evaluate the effectiveness of the questions; and figure the payroll for a company with a thousand employees; or verify the position of three hundred aircrafts within an air traffic control area.[63]

What we see in the work of Charles and Ray Eames, is not just the penetration in their practice of existing and new technological media as film, photography and the computer, but the problematic position of the subject in such a new technological environment, which, on the surface, seems to be immediately resolved by the parallels built between subjective agency and machine operation. The Eameses' work is not only the reflection of this information landscape, but also a producer of it. Moreover, describing the Eameses' process of work, specifically their film *House: After Five Years of Living,* Michael Brawne says:

> The interesting point about this method of film making is not only that it is relatively simple to produce and that rather more information can be conveyed than when there is movement on the screen, but that it corresponds surprisingly closely with the way in which the brain normally records the images it receives. I would assume that it also corresponds rather closely with the way Eames's own thought processes tend to work. I think it symptomatic, for instance, that he is extremely interested in computers (joyously described in his IBM films), and that one of the essential characteristics of computers is their need to separate information into components before being able to assemble them into a large number of different wholes.[64]

61 Charles Eames and Ray Eames, "An Introduction to Feedback," (1960).
62 Boolean Algebra was invented by George Boole in 1854 and was developed in his book "An Investigation of the Law of Thought".
63 Charles Eames, "A Computer Glossary or Coming to Terms with the Data Processing Machine," (International Business Machines (IBM), 1968).
64 Michael Brawne, "The Wit of Technology," *Architectural Design* 36 (1966).

The Eameses' work for IBM facilitated this ideological construction, where the operability of the computer was used as an analogy of the process of human cognition, 'naturalizing' its operation. Their films for IBM exploit this analogy and for that reason they are highly ideological. Like a screen, they expose as much as conceal. Behind the soundtracks, animations, narratives, and editing processes, a less innocent institution and mode of practice can be found gathering, storing, processing and transmitting valuable information.

3.1.4 The Multiple Image and the Roaming Eye

The use of film as an ideological construction was not only limited to their work with IBM, but also expanded to other collaborations, such as the one they produced for the US State Department through their film *Glimpses of the USA* (1959*)*. Displayed as part of the United State pavilion at the Moscow fair;[65] *Glimpses of the USA* was a thirteen-minute-long film showing images of a typical day in the United States. What is unusual about the film is not so much its narrative as the way it was projected: the fragmentation of the film into seven screens hanging from a geodesic dome (designed by Buckminster fuller) [fig. 3.14]. For Beatriz Colomina, the images of this film become possible only through the use of technologies such as satellites, aerial photography, telescopes, night vision cameras, zoom lenses and so on.[66] The same surveillance devices directed toward enemies are used in the construction of a narrative that highlights the domestic superiority of one country over another.

This idea, was reinforced by other attractions at the fair, like the 'Splitnik' (called that by the Russians)[67] – a house specially constructed for the exhibition, split in two, where visitors could experience the 'typical' American middle-class house. The partition of its structure was not just to create a better display of goods, but also became the stage of the famous dialogue known as the 'kitchen debate' between the leader of the Soviet Union, Nikita Khrushchev and the Vice-President of the U.S. Richard Nixon [fig.3.15]. The discussion was focused not on missiles, rockets and military technology — as during that time the United States was in disadvantage in relation to its Soviet counterpart — but on the application of technology in the domestic space, and the penetration of the consumer object as evidence of American superiority. These ideas circled around a wide variety of exhibits in the fair: the jungle gym, a multilevel structure arranged as a department store filled of different items including a model apartment (planned for a physician with one child);[68] RAMAC, the IBM computer programmed to respond to over three thousand listed questions about the U.S, an early example of American materialisation of electronic communication;[69] the Whirlpool miracle kitchen demonstration; a television set, and some beauty and make-up demonstrations as well as fashion shows. All were intended to display the wide availability of consumer goods for the average American citizen.[70]

This overabundance was reflected and reinforced in the film through the fragmentation of the screens (their shapes recalled and performed more as television instead of cinema screens) and the rapid succession of images (many of them on screen for no more than 3-4 seconds) [fig.3.16]. If it is well controlled, the fast-cut technique can show an enormous number of images in a short period of time, allowing the viewer an understanding and a general idea of what he is watching without being either totally absorbed by an image or absolutely confused by many. For the Eames, both the American and Soviet audience were already schooled in this kind of vision. As Charles expressed in a letter to the film editor Henry Hart:

> We soon narrowed the approach to the use of multiple, but related, images — with the general assumption that the international acceptance of picture magazines (*Life* type) has universally trained people to thumb through double page spreads, scanning 6, 8, or 10 at the time. In some not too thorough test, we found that it was usually possible to absorb the content of about four related images during a short cut (approximately 3 seconds). When this number of images it was increased to 6, 7, or 8, one seems to be aware of all of them, even when not permitted to absorb any in detail. This awareness seemed in keeping with the prime objective — which was credibility.[71]

This new eye — trained to scan the visual environment — has been displaced from its warfare application and re-oriented toward the post-war consumer society.

In 1953, the Independent Group at the had opened their exhibition *Parallel of Life and Art*. Organised by Eduardo Paolozzi, Nigel Henderson, the Smithsons and Ronald Jenkins, the exhibition displayed 122 photographic boards hanging and suspended at different angles and formats at the Institute of Contemporary Arts in London. Coming from a dissimilar variety of sources, the images were arranged together without any logic other than creating future associations between them by the position they occupied in the gallery space.[72] Photographs from scientific magazines — art works, newspapers, medical x-rays, geological and aerial views, archaeological documentation and so on — were placed side by side without apparent order and attached by a network of cables to the ceiling and walls of the gallery.

The exhibition — coincidentally the same year *A Rough Sketch for a Sample Lesson for a Hypothetical Course* was presented — justified the use of disparate images and its arrangement as a way of becoming aware what the human eye was taking for granted: the incredible amount of images surrounding and mediating our visual environment. One of the organisers of the exhibition, Nigel Henderson declared:

> Technical inventions such as the photographic enlarger, aerial photography and the high speed flash have given us new tools with which to expand our field of vision beyond the limits imposed on previous generations. Their products feed our newspapers, our periodicals, and our films being continually before our eyes…Today the painter may find beneath the microscope a visual word that excites his senses far more than does the ordinary word of streets, trees and faces.[73]

3.14

3.15

3.16

3.14— United State pavilion Designed by Buckminster fuller. American National Exhibition, Moscow (1959).

3.15 — the Soviet Union, Nikita Khrushchev and the Vice-President of the U.S. Richard Nixon at the 'Kitchen debate'. American National Exhibition at Sokolniki park, Moscow (1959)

3.16 — Inside of the United State pavilion. Seven screens hung from the dome displaying the film *Glimpses of the USA*. Charles and Ray Eames (1959).

65 The exhibition was an agreement between the U.S.A and the U.S.S.R government, to create an environment of exchange between the two superpowers. With that purpose in mind, a Soviet exhibition was opened in New York in June of 1959, while their American counterpart did the same in Moscow in the month of July of the same year.

66 Beatriz Colombian, "Multi-Screen Architecture," in *Public Space, Media Space*, ed. Chris Berry, Janet Harbord, and Rachel O. Moore (Houndmills, Basingstoke, Hampshire ; New York, NY: Palgrave Macmillan, 2013).

67 Colomina, "Enclosed by Images: The Eameses' Multimedia Architecture."

68 Jack Masey and Conway Lloyd Morgan, *Cold War Confrontations : Us Exhibitions and Their Role in the Cultural Cold War* (Baden, Switzerland: Lars Müller, 2008).

69 The programmed developed by IBM could also record the most popular questions asked, and the frequency of them; from this point of view RAMAC can be seen as a precursor for internet search and contemporary database. See: James Schwoch, *Global Tv : New Media and the Cold War, 1946-69* (Urbana, Ill: University of Illinois Press, 2009).

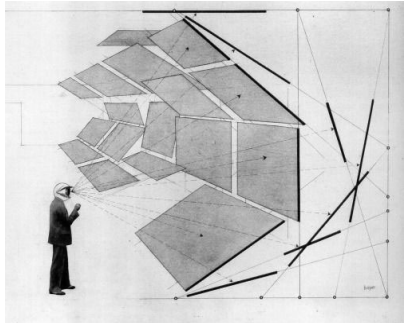
70 Masey and Morgan.

71 Charles Eames, *An Eames Anthology : Articles, Film Scripts, Interviews, Letters, Notes, and Speeches* (New Haven, CT: Yale University Press, 2015), 193.

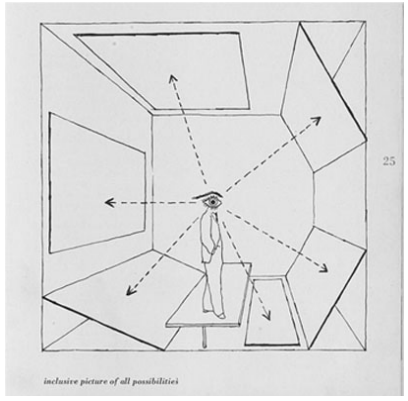
72 Victoria Walsh, *Nigel Henderson : Parallel of Life and Art* (London: Thames & Hudson, 2001).

73 Ibid., p. 90.

3.17



3.18



3.19

3.17 — Image from the exhibitions, *Parallels of Life and Art*. ICA (Institute of Contemporary Art), London (1953).

3.18 — Drawing of Herbert Bayer for the installation at the *Deutscher Werkbund* (1930).

3.19 — Herbert Bayer, excerpt from The Fundamentals of Exhibition Design (1937)..

Both exhibitions, *Parallels of Life and Art* and *Glimpses of the U.S.A.* supported the simultaneous display of images — one photographic, the other cinematic — under the idea that the post-war subject is almost unconsciously trained to absorb, understand and even classify an enormous amount of visual information. In *Parallels of Life and Art*, the photographic image, its meaning and context were challenged depending on its proximity with other images, angle of view and its position within the whole [fig.3.17]. Thus, the subject's position in the space, his field of view and his own personal experience, operates to re-contextualise the photographs. However, something that was casually arranged in *Parallels of Life and* Art[74] — allowing the viewers to form their own relations, to move freely inside the space of the gallery, and to choose a particular vantage point — was fully planned and ideologically charged in *Glimpses of the U.S.A.* The sequence on the screens was the key element giving credibility to the film. The rapid flow of images and their fragmentation, secured the perfect balance in which the spectator cannot contest the credibility and the benefits of those images in the society. As Charles emphasises:

> If someone could see all this traffic, any Russian in his right mind would say, 'if our ambition was to have a car for every man, woman and child — forget it! [laugher] A lot rather negatives things like this came through if you were quick enough[75].

Glimpses of the U.S.A. was an experiment involving the audience's capacity of perception (trained and tested in previous Eames work like *A Rough Sketch*). It is impossible to separate the narrative of the film from its exhibition format. The fragmented display of the images, does not interrupt the linearity of its narrative, and it is still possible to follow a coherent story — beside the fact of being simultaneously spread onto seven screens.[76]

Inspired by technological innovation, the multiple-screen presentations seem to be the natural step to follow in which the effect of information overload is produced by the simultaneity of screens. Here, the eye is not only required to arrest the images one after the other, but to rove around them constructing associations in their juxtaposition and not only through their succession. As has been said, early experiments in form of exhibitions challenged the role of the observer as a passive subject, involving him as an active participant in the construction of the artwork or its display. In Ernesto Rogers' exhibition at the Milan Triennale (1951), multiples photographic panels were placed at different angles, detached from the wall, hanging from the ceiling, and obstructing the navigation through the exhibition.

74 Ibid.

75 Eames, *An Eames Anthology : Articles, Film Scripts, Interviews, Letters, Notes, and Speeches*, p. 193.

76 Colomina, "Enclosed by Images: The Eameses' Multimedia Architecture."

The sketches produced by Austrian designer Herbert Bayer for the installation at the *Deutscher Werkbund* (1930) for instance, replaced the head of the observer with an eye that, from a single position, was able to project various lines of vision over the images placed at different angles [fig. 3.18]. These images were drawn as a series of screens encircling the subject's field of vision. This arrangement was intensified a few years later when he drew the *Diagram of 360° Field of vision,* in which the subject was surrounded by multiple screens. In his new drawing, the images begun to enclose and define a space – the eye that replaces the subject's head suggests that knowledge has been taken over by vision. And this is not any mode of visualisation, but a monocular vision, a camera-eye [fig 3.19]. The human body remains static and immobile, while his eye (a single one) seems to move freely around the different images – the space is perceived through a disembodied eye. Following this idea, in 1961 the architect and designer Ken Isaacs — who became later known for the design of his modular units *living structures* — developed the *Knowledge Box*, a 3.5m cube with 24 slide projectors, four at each side. The purpose of the *Knowledge Box* was to deliver information in a rapid sequence of images to a person inside the box. The idea — remarkably similar to a *Rough sketch* — was to erase the barriers between different fields of knowledge, as well as to teach a viewer through a flood of images.[77] Inside the *Knowledge Box*, the body is confined while the viewer's eyes moves in all directions to grasp the information projected.

House: After Five Years of Living — together with other Eames multi-screen presentations — can be seen as the enactment of an emergent new information economy in the U.S, a large economic shift in which the production and exchange of information began to supersede its product-based economy.[78] Elements of the new communication theories, the dissemination of media platforms (exhibitions, publications, films, television programmes and advertisements) and its cultural context, acted as a network that informed the Eameses' work. Media practices are not only used by them, but also operates in (i.e. folds back into) their own work. For example, photographic tests were made in the design of the Eameses' house interior. As Ray Eames commented: "We used to use photographs. We would cut out pieces from photographs and put them onto a photograph of the house to see how different things would look."[79] There is a practice of stitching that varies depending on the medium in which it is carried out. Some of the panels that covers the glass inside the house are demountable: views, reflections and transparencies can change. Fragments of disparate things, scales and cultural references — like their craft collections — are gathered not only in the design of the house but also in its representation on the media.

This mode of working will permeate not only their architecture, but also their other productions. Almost everything was treated as an intermingling of images that can be arranged by the viewer/user. In *House of Cards* (1952) and *Giant House of Cards* (1953), a series of slotted cards with disparate images (one side in 'House of Cards' both sides in '*Giant House of Cards*') can be assembled and disassembled according to the player's will, forming almost infinite combinations and associations constructed by the subject — producing and reproducing their own information out of the same fragments. In *The Toy* for example, the Eames designed a set of coloured and geometric panels, a lightweight structure that can be assembled and re-arranged according to the user. For Colomina, this very idea of the unfixed, of the always changeable, not only reflects the adaptation of military equipment into the domestic life but also plays with the unconscious, giving a false sense of control over their environments in a world constantly under the threat of nuclear attack – a sort of ideological device in the form of a screen that tries to disguise or camouflage the reality by the very manipulation and distortion of it, proposing an alternative one.

3.1.5. The Nuclear Threat: Screening New Anxieties Over the Visual and Urban Landscape

The Eameses' own interpretation of montage helped them to organise and deliver a coherent message through an overflow of images — exploring, testing and expanding the subject's capacity to absorb visual information. These visual explorations, were carried out in the context of war, in an environment of trauma lefts by the WWII. But also by the very anxieties and preoccupations emerging as consequence of the nuclear threat. In this context, the film *House: After Five Years of Living* can be understood as a testing ground in which new technologies, modes of representation and preoccupations were screened. It is not so much *what* is being shown, as *how* it is being shown. One of the aspects that can be discussed and that permeates most of the Eameses' work is its multiplicity and redundancy. The film organises a series of images that follow a sequence inside the house, with the camera moving just a few metres instead of skipping from one side to the other.

This logic demonstrates a certain order in the displacement of the camera. In this movement, the camera seems to be scanning rather than just showing fragments of the space, as if the house were a body that is being examined gradually, meticulously, looking and searching for some abnormality. If one takes the images and puts them side-by-side, the first thing revealed is the multiplication, from different perspectives, of a single space or element at the

77 Paul Welch, "The Knowledge Box," *Life Magazine* (1962).

78 Masey and Morgan.

79 Kirkham.

house. This reiteration can be seen, for example, in the sequence of the spiral staircase presented at least fifteen times throughout the film. First, the camera shows it from the outside (the door is open); then it faces it as if we were about to go up; and later a series of zooms in different angles shows it upwards and then downwards. It is almost as if we were in search of something else, something not related to the architecture of the house, but rather to its inhabitants [fig. 3.20].

This sequence — as with many others in the film — recalls the sequences seen on the screens of the control rooms or operations control centres. The multiple screens in these rooms — connected to CCTV cameras — are meant to record, survey and control a specific space. In most of them, this control refers to security issues as monitoring criminal incidents, where the images displayed on the screens (whatever a single screen divided in many images or several screens arranged together) glimpse a few seconds to be then replaced by the image recorded by another camera. This multiplicity of images is not only restricted to surveillance purposes, but also expands to other practices such as war rooms or traffic control rooms, and even more recently to television screens — where it is possible to split the screen in several images or to scan simultaneously through different channels.

In *House: After Five Years of Living*, it seems as if old fantasies of control and surveillance has been put into practice. The eye looking at the screen is observing a multiplicity of images of the house, reiterative and recurring views of it in different perspectives. These ideas of visualisations transplanted from a military context were not something new for the Eames. In one of his Norton Lectures, Charles envisions the new modes of city planning as the way a war room works. As he asserts:

> In the management of a city, linear discourse certainly can't cope. We imagine a City Room or a World Health Room (rather like a war room) where all the information from satellites monitors and other sources could be monitored…The city problem involves conflicting interests and points of view. So the place where information is correlated also has to be a place where each group can try out plans for its own changing needs.[80]

But if we are looking at the film as if we were in a war room, what do we expect to find? The camera moves inside the space where rather than finding something, we realise that it is uninhabited, empty of any human presence. The sequence might well recall a post-apocalyptic event in which the camera is searching for any human trace. If in Le Corbusier's film *L'Architecture d'Aujourd'hui* we occupy the space of an intruder, of a spy,[81] here we might well be witness of the aftermath of a nuclear attack: looking for a trace of life, analysing every single element; a zoom to a leaf on the floor, a table, the ceiling, the landscape framed by the house, all of them however completely static, inanimate, frozen [fig. 3.21]. This effect is similar than the one caused by the 'neutron bomb' developed in the late 1950's. A small thermonuclear bomb which increase lethal neutron radiation while minimizing the damage to property caused by the its blast.

The film's suggestion of a post-apocalyptic scenario — and the role of the architects in producing it — was not something new during the Cold War years. It was in 1950, under President Truman's administration, that Congress approved the foundation of the Federal Civil Defence Administration (FCDA), tasked with studying the effect of a nuclear attack in the civil population and the social welfare planning for its outcome.[82] The FCDA, replaced in 1958 by the Office of Civil Defence Mobilization OCDM, prepared a series of publications, films and advertisements promoting the behaviour and steps to follow in case of a nuclear attack. Perhaps their most famous campaign, 'Duck and Cover' (implemented mostly in schools), teaches children to get down, kneel and cover under their desks with their hands clutched around their heads and necks. These kinds of tactics, among others, were used by the FCDA to train the civil population but also to transmit a false message of control — the idea that a nuclear attack could be handled and its damages contained, normalising some behaviours within the population and turning tactics into habits.

In *Survival Under Atomic Attack*, a promotional film made by the FCDA, an average middle-class family is depicted on the screen following a daily routine: checking the batteries of their torch and the radio, cleaning the basement (as a potential refugee space), keeping always fresh water on their refrigerator, maintaining the yard clean and keeping canned food safe from radioactivity.[83] Another film produced by the FCDA, shows a father washing his son's hair to clean and remove any radioactive dust after a nuclear attack. These films were not only about strategies and procedures, but also — at the background — gender roles were assigned and family values were promoted and reinforced to contain the threat, as external forces operating over the domestic sphere.

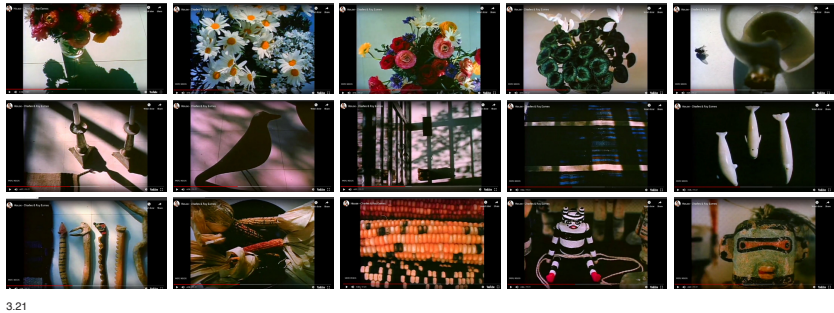
80 Halpern, p. 135.

81 Colomina, *Privacy and Publicity : Modern Architecture as Mass Media*.

82 David Monteyne, *Fallout Shelter : Designing for Civil Defense in the Cold War*, Architecture, Landscape, and American Culture Series (Minneapolis: University of Minnesota Press, 2011).

83 "Survival Under Atomic Attack | Cold War Era Educational", YouTube video, 8:45, posted by "The best film archives", January 20, 2018, https://www.youtube.com/watch?v=WH8AQAgwbY4

3.20



3.21

3.20 — The spiral staircase shown fifteen times from different angles in the same sequence. House: After five Years of living (1949). Charles and Ray Eames.

3.21 — Traces of life in suspension. House: After five Years of living (1949). Charles and Ray Eames.

The role of architects in this catastrophic scenario was developed in different stages according to their knowledge. Occasionally this role was as simply as to build good and better fallout shelters, help in the survey of existing buildings that could be used as potential refuges or even to determine which would be the adequate materials and construction systems to protect the population from the nuclear threat.[84] But, in others, their role was more complex, helping in the re-configuration of the whole American landscape. For many civil defence administrators, like architects and urban planners, there was a consensus that a hypothetical nuclear attack would first hit the city centre of major cities. Therefore, in most of the advertising campaigns made by the FCDA, the downtown was the place portrayed as the most vulnerable area. Contrasting with this idea, the remoteness of the suburbs would be the most desirable place to be in case of an attack. The anxieties of a nuclear threat, motivated urban renovation and the dispersal of the cities.[85]

It is within the context of this urban renovation that the Case Study House Programme took place. It was not just an urban dispersal to the suburbs, but when the time came to design its architecture, the Programme proposed the dispersal of the house itself. The desires for new living standards found fertile ground with new technologies and materials developed during WWII, but also the search for cheaper land at the outskirts of the cities and the idea of a nuclear attack encouraged the dispersal of human settlements into the countryside. This expansion created a new relationship between the house and its landscape, a sort of wilderness that had to be domesticated for the new living conditions. Absorbing some of the principles of the 'International style', this new domesticity exploited by the Case Study House Programme suggested the blurring of the limits between the interior and the exterior. Large glass panels, sliding windows, as well as skylights and trellises, allowed the convergence of the inside and the outside in a single space,[86] as if the house were merged or even camouflaged into the landscape. It also allowed to increase the sense of space to infinity, suggesting the new domestic space as a space for play in nature.[87]

Perhaps attending to this relationship, in 1978 the Case Study House #8 appeared again in a short film called *Lucia chase (Polavision vignette)*.[88] Produced by the Eames with the aim of testing a new video technology (polavision), the film portrays a sequence of Eames Demetrios, grandson of Charles Eames, escaping from his mother Lucia after stealing her diary. The chasing sequence starts at the gardens, where Lucia is reading a book, and follows into the house. Its interior is used as a diversion device by Eames Demetrios, who enters by the main door, climbs up the spiral staircase and escapes through one of the windows on the second floor. The whole sequence implies the garden and the house as playground areas blurring the distinction between inside and outside.

In *House After Five Years of Living* the privacy is transgressed. We are witness to the interior space but also to the personal objects of the owners. The camera shows an endless array of fragments of its interior and exterior – however, as in *Glimpses of the U.S.A*, the fragments are carefully constructed. The camera is not panning. The view is fixed as if we were looking through peepholes whereby what is viewed is a staged construction of a landscape, a territory. Only the public spaces of the house are shown: the main hall, the spiral staircase, some fragments of the corridor and the workshop. There are no images of any room, nor of the kitchen or the bathroom. The openness of the house, the lack of walls and subdivisions are carefully concealed by the same mechanism that exposes them – the camera. The camera reveals but also veils the spaces of the house — this is perhaps more evident in the exterior sequence of the film in which the house is always revealed from a specific side, as a screen, performing a front that builds its exterior image while the rear view is never revealed.

The glimpses of the different spaces resemble the inspection of a film set before shooting begins. Like a script supervisor — who might use a Polaroid camera to register the exact position of the different objects and elements on a stage to ensure continuity in a sequence — the film seems to be checking that everything is in its place before the action is restored. The domestic space is a film set ready to be shot. In a society, were being modern is also being displayed,[89] the film seems to exhibit the preparation of the house before the occupation of its inhabitants. Yet, it is in the creation and arrangement of film sets in which Charles was already trained when working at the MGM in the early 1940s.[90]

In *House after Five Years of Living*, food has just been served on the table (outside and inside) and no one has touched it yet. We do not know how or where this food has been prepared. Is this real food? Or are they just props to be photographed? The different decorative objects, crockery sets, pieces of their work in progress, furniture and so on are part of their domestic environment but, by displaying them, they are also turned into elements of production – producing an image, an idea, values and a lifestyle. Yet, in the film, the Eames are hidden – they are not working in the workshop, eating, sitting or washing the dishes. What we see are just objects, but not the ones displayed four years later inside the 'splitnik' (at the United States pavilion at the Moscow fair), rather the so called 'functioning decoration'[91] — craft and found objects that contrast with the mass-produced industrial structure of the house. This is what the film persistently displays: a constant tension and shift between old and new, local and global, domestic and industrial. If Colomina says that: "In the Eames film there are no figures, only traces of their ongoing life"[92], perhaps is better to say that more than ongoing, what we see are traces of a life in suspension, of an interrupted sequence. This interruption, characterised by its editing process, display a domesticity in a constant act of expectation.

84 Monteyne.

85 Ibid.

86 Christine Macy and Sarah Bonnemaison, "Nature Preserved in the Nuclear Age: The Case Study Houses of Los Angeles, 1945," in *Architecture and Nature : Creating the American Landscape* (London ; New York: Routledge, 2003).

87 Ibid.

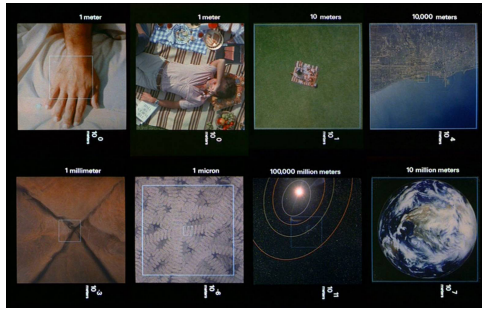
88 Charles Eames et al., *The Films of Charles & Ray Eames. Volume 2* (Santa Monica, Calif.: Pyramid Media,, 1989), videorecording two-dimensional moving image, 1 videocassette (62 min.) : sound, color ; 1/2 in., PHV 09115 Pyramid Media.

89 Beatriz Colomina, *Domesticity at War* (Barcelona: Actar Editorial, 2006).

90 "Reflections on the Eames House," in *The Work of Charles and Ray Eames : A Legacy of Invention*, ed. Diana Murphy (New York: Harry N. Abrams in association with the Library of Congress and the Vitra Design Museum, 1997).

91 Pat Kirkham, "Humanizing Modernism: The Crafts, 'Functioning Decoration' and the Eameses," *Journal of Design History* 11, no. 1 (1998).

92 Colomina, "Reflections on the Eames House," p. 144.



3.22

3.22 — Snapshots of the film *Powers of Ten*. Second version (1977). Charles and Ray Eames.

3.2 From Vertical displacement to Rhythmical Obliquity: The Perspectival Redundancy

What we see in *House: After Five Years of Living*, is not the house through the lens of the camera but rather slides of it – shots with a photographic camera, later filmed in a 35mm motion picture camera[1]. What is interesting about this technique is that, even though the images follow a route inside and outside the house, this route is re-constructed on the screen through a series of photographs taken at different periods. This means that the apparent movement inside the house is only possible through the stitching of different temporalities.

If one takes and unfolds all the images in the film, it is possible to find an alteration of its interior along that route. For example, in the sequence that shows the main hall, the carpets, pots, plants and flower vases appear and disappear from the same place and the ladder is shown hanging from different trusses every time. The house appears as a collage made of different versions of it. But it is not just the constant alteration of the house's interior that confuses the eye or the rhythmically disclosure of its images and its time of exposure – it is also the angle at which the camera records its interior, which creates an uncanny re-enactment of the domestic space.

In this collage of multiple views and representations, the film juxtaposes images taken at different times, distances and angles. The technique of filming slides was improved years later in another Eames' film, *Powers of Ten* (*A Rough Sketch for a Proposed Film Dealing with the Power of Ten and the Relative Size of the Universe).* Produced for the 1968 Commission on College Physics,[2] the film was part of an effort to communicate and visualise science to a broader audience, transferring knowledge to both a scientist and a child.[3] Based on the 1957 book *Cosmic view: The Universe in 40 Jumps* (1953), the film takes us on a vertical journey toward outer space across distances increasing sequentially to the power of 10. Starting from a picnic scene, the camera zoom out to a scale of 10 times every 10 seconds until it reaches the view of the galaxies at 10^{+24} meters. The camera then zooms back, returning to the picnic scene, penetrating the man's hand, and displaying an inner world that fades into black at 10^{-16} ,one-tenth the size of a proton[4] [fig.3.22].

A second version of the film was produced in 1977 with the advice of Philip Morrison, an MIT physics and one of the organisers of the 1968 conference. In this new film, two more powers were

1 John Neuhart et al., *Eames Design : The Work of the Office of Charles and Ray Eames* (New York: H.N. Abrams, 1989).

2 Charles Eames et al., *Connections, the Work of Charles and Ray Eames : Frederick S. Wight Art Gallery, University of California, Los Angeles, December 7, 1976-February 6, 1977* (Los Angeles: UCLA Art Council, 1976).

3 Charles Eames, "Language of Vision: The Nuts and Bolts," *Bulletin of the American Academy of Arts and Sciences* 28, no. 1 (1974).

4 Eames Demetrios, *An Eames Primer* (New York: Universe Pub., 2001).

added to the sequence, and the picnic setting was changed from Florida to Lake Michigan. The film has been largely discussed in relation to the similarities found at the macroscales of the universe, and the microscales of the human body,[5] but also the way in which different scales can shift our perception of things. However, what is striking about it is the way in which it was produced. The technique used placed a motion film camera zooming-out from the centre of forty-two different images. While zooming-out, each image was shoot 240 times; that is 10 seconds of film in which the centre of the image is reduced to one power.[6] When the camera reaches the final frame, the photograph is replaced by another which contains on its centre a ten-times reduced version of the previous image, and the process is repeated.

With images coming from an array of different sources, only 15 out of the 42 images were photographs. Many of them had to be retouched so that they looked more realistic on the screen, but also drawings and models were made when no images were available. This was the case of the twisted DNA helix, or the animation that portrays the electron shells and quarks.[7] The film, was the result of the delicate and controlled movement of the camera in relation to photographs. Behind the final image that we see in the film, there is a series of manoeuvres and tricks simulating the movement of the camera. We assume that we have superseded the constraints of our vision, but in fact we are part of an illusion that can be exhibited only through the act of veiling a reality that is concealed under its representation. The whole sequence is the reconstruction of a series of overlapping images: we are not travelling into the space and then back to the inner world of the human body, rather we are watching different layers of images, photographs, animations and representations.

This construction is highly ideological, it is not just about the artifice conceived in its production what is masked in its display, but the preoccupations and motivations arising in the context of the Cold War — a sense of control of what can be seen (the entire globe and beyond) and the displacement of knowledge gained during the 'space race' into the field of the human body[8] — are also obscured under its intention to communicate science and produce knowledge.

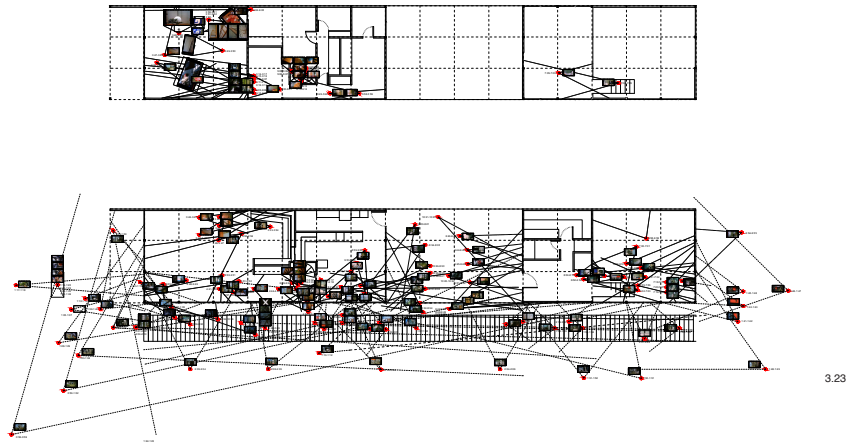
While in *Powers of Ten* the scale of things seems to be determined by the size at which things appear on the screen, in *House: After Five years of Living*, the scale of its interior is also activated by its multiple angles of representation. Objects are not just rendered vertically or frontally, as if zooming-in and out, but also laterally. The house's interior and its objects continually change their angle of representation, showing the same piece of furniture, decoration, crockery set and interior space from different distances and views: the house appears strange because — helped by its rhythmically disclosure — constructs a perspectival redundancy.

In *House: After Five years of Living* it is possible to find the paradoxical situation where the representation of the space is jumbled by the plethora of perspectives. Unlike *Powers of Ten* — where in an almost cyclical move the surface of the skin seems to mediate between parallel worlds[9] through the vertical projection and introjection of the camera – here we move in staccato from one place to another. As if in a card catalogue the film seems to show both the house as object and the house as an archive. This mode of presenting negates the camera's capacity to record moving objects. If in Powers of Ten, there is a perceptual effect of continual movement, in *House* there is a constant interruptive mode produced by the cross-cut effect of the camera. This mode of presenting the domestic interior, seems to collapse on the screen the distance between one space and the other.

3.2.1. Camera Deployment: Spatial and Structural Locality

As part of the design research, and in order to acknowledge the deployment of the photographic camera outside and inside the space, a series of floor plans was redrawn. Although, as I have noted, the photographs were taken at different periods, throughout filming the images were reorganised into a sequence in which the camera follows a recognisable route: (1) exterior shots, (2) interior shots of the house, (3) exterior shots between the house and the workshop, (4) interior shots of the workshop, (5) interior shots of the house, and (6) exterior shots of the house at dusk.

The first set of drawings maps this route, where red spots show the camera's position; the dashed lines the optical field of the exterior shots, and continuous lines the interior ones [fig. 3.23]. This mapping is divided between the ground and first floors. A few features can be discerned in in this initial mapping: the excessive number of shots consistently showing the same spaces of the house, and the areas in the house that are not shown in the film and thus remain concealed and invisible to the viewer.



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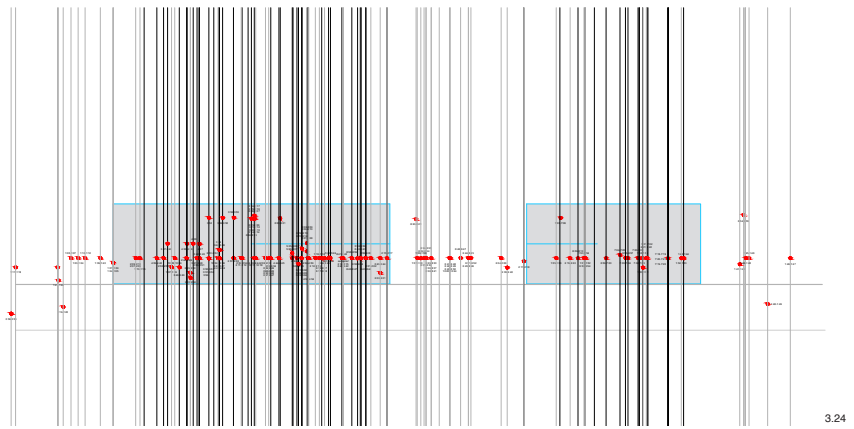


3.24

3.23 — Mapping of the film *House: After Five Years of Living*, onto the floor plan of the house the house. Sebastian Aedo.

3.24 — Elevation drawing of the Case study House #8. The Red points show the positions of the photographic camera inside the house. The vertical lines show the lateral density of the camera inside the house. Sebastian Aedo.

5 Philip Morrison, Phylis Morrison, and Office of Charles and Ray Eames., *Powers of Ten : A Book About the Relative Size of Things in the Universe and the Effect of Adding Another Zero*, Scientific American Library (New York: Scientific American Books Inc., 1982).

6 Ibid.

7 Ibid., p. 145.

8 Mark Dorrian, "Adventures on the Vertical: From the New Vision to *Powers of Ten*," in *Writing on the Image : Architecture, the City and the Politics of Representation* (London ; New York: I.B. Tauris, 2015).

9 Ibid.

Among these are the kitchen and dining areas, most if not all the first-floor rooms, and some in the workshop area. However, what is more noticeable is the clear overall picture of the front of the property provided by the distribution and direction of the photographic camera. The back of the property is never included. The house is portrayed from the outside literally as a *screen*. However, this mapping suggests only a partial distribution of the camera apparatus and the direction of its lens is represented in two dimensions rather than reflecting its real position in the space. For this purpose, an elevation drawing is produced using the floor plan in which the camera can appear detached from the ground [fig. 3.24]. Most of the cameras (marked by red spots) are at eye level; some sit very low on the ground while others are situated higher up, closer to the ceiling. In this drawing it is possible to cut away the house at right angles to its longitude and see how dense a structural bay becomes by the penetration of the photographic equipment. The elevation becomes a sort of bar code organised by the distribution of the cameras. Reading the position of the cameras in elevation, we observe a constant tension between contiguity (the distribution of cameras across a single surface) and substitution (the position of the camera overlap the position of other cameras).

This structure of contiguity and substitution is also a technical effect. Thus contiguity, in *House: After Five Years of Living*, happens through the camera's staccato apparent movement from one place to another but always within the same space of the house, following a journey (as described above) that records adjacent spaces. Substitution, on the other hand, takes place through the cyclical technique used that constantly overlap different mediums on the same image. A photograph is taken; its slide (Kodachrome) held and positioned; then filmed using an Eastmancolor Negative film inside a Mitchell Standard 35 mm camera; and finally loaded onto the projector[10]. The mapping not only displays a spatial distribution but, through the deployment of the camera within the structural framework of the house, may enable a technical situation to be read, one that simultaneously involves contiguity (spatial immediacy) and substitution (one medium over another). But also within the same process of projection, the film seems to equal this taxonomic structure. Thus, contiguity happens through the interplay between the rhythmic acceleration and pausing of their images (it fast-cut technique); while substitution can be visualised in the 'dissolves' that simultaneously merge the replacement of one image for another, 'slowing down' its tempo.

In a further axonometric view [fig. 3.25], the house appears as simply containing objects, not domestic objects but photographic cameras positioned inside. However, while this diagram says something about the distribution of cameras, it tells us nothing about the image produced or from what angle it was produced.

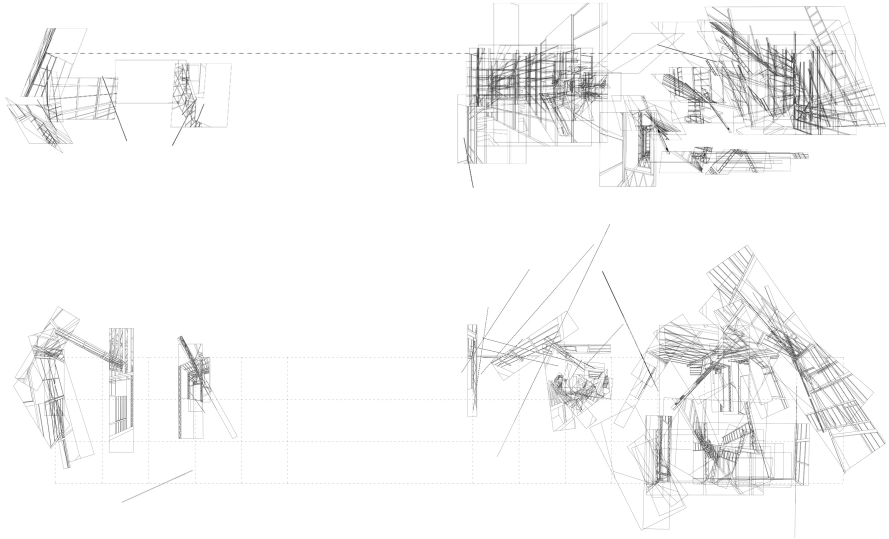
3.2.2. The Image Seen: Anamorphism as a Technical Dislocation

The following drawings are a series of perspectival images obtained by tracing the individual photographs making up the film and relocated them back into the interior of the house. We are now working only with interior images. For this purpose, I use Rhinoceros, to create a 3D Cad model of the house. Inside this model, I place a 35mm camera in a position that matches that of the camera used for filming, acknowledging its position within the house, its angle, and the distance between the lens and object or plane being filmed [fig. 3.26 and 2.27]. The perspectival drawings can now all be seen simultaneously, in elevation and floor plan, leaving only the structural grid as a reference for the house's boundaries [fig. 3.28].

Viewing these drawings as a plan view, the photographs — now drawings — return to the house; in this move something is transformed or fails to return to its original state. Sequence is replaced by interruption, time of exposure by duration and the bright image on the screen by the transparency of the drawings. In this mapping, the perspectival drawings are not just spatially arranged, but scaled in accordance with camera positionings. Thus, some images become larger or smaller depending on the distance between the camera and the object (stairs, table, painting, chairs and so on) or plane (wall, ceiling, window pane, door, floor). As noted in *Powers of Ten,* in *House: After Five Years of Living,* scale is also determined by our relative position (i.e. location of the camera) in relation to them. However, in the mapping, the size of the drawings is inversely proportional to the camera's distance, as if it were operating as a film projector; that is, the bigger the 'screen' (i.e. the drawing's frame) the farther away is the relevant camera. The floor plan of the house it turns into a collection of screens (perspectival drawings) activated by the corresponding camera. The house as a container disappears as do its boundaries.

When we look outside the perspectival drawings (orthographic view) [fig. 3.28], the house is transformed into a series of distorted perspectives hovering in the space and held together only by their

10 Alex Funke, Email, July 2019.



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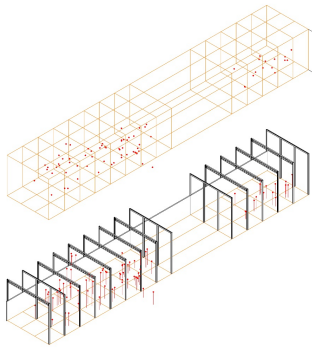

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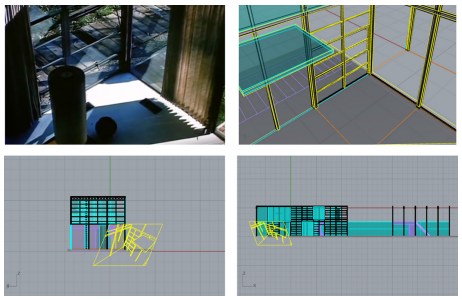

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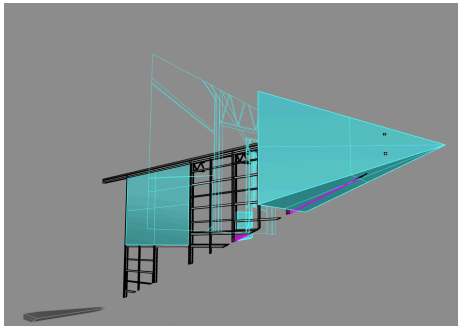


3.25 — Axonometric view of the deployment of the photographic camera inside the Case study House #8. Sebastian Aedo.

3.26 — A Three-dimensional model of the house is bult. here a two-dimensional drawing is drawn tracing each one of the images of the film. In a second process, these drawings return to the space of the house as pictures planes. Sebastian Aedo.

3.27 — A view showing the relationship between the photographic camera, the picture plane and the three-dimensional fragment of the house. Sebastian Aedo.

3.28 — Elevation and floor plan view for all the film images traced, which folds back into the space of the house. Sebastian Aedo.

frames. However, this distortion is not only produced by the orthographic view of perspectival drawings but, more radically, by their simultaneous visualisation and the position of their frames, inclined and rotated at different angles. The house is transformed into anamorphic views, revealing not the habitat of the occupier but the expansion of its interior from the penetration of a mechanical eye.

By using Hans Holbein's painting *The Ambassadors* [fig. 3.29], Lacan explain the difference between the eye and the gaze, through the effect of anamorphism constructed in the painting. *The Ambassadors* shows two figures: to the left Jean de Dinteville, French ambassador to England in 1533 and to the right Georges de Selve, Bishop of Lavaur. Both figures are standing looking at the viewer and surrounded by objects and instruments associated with their worldly knowledge and achievement. However, at the bottom centre in the picture appears a large and distorted image – a stain. If the viewer moves his eye from the centre towards the right corner, the unclear image turns out to be a skull. Now, with the subject's displacement in space, reality as represented has been removed.

The establishment of another geometrical point in the same image shows the viewer is at once inside and outside the 'picture', the very representation of the subject's annihilation. For the philosopher Slavoj Žižek, the blind spot, represented by the stain in the painting, is nothing other than the viewer's presence in that reality.[11] Reality, as it is composed by the representation is interrupted, torn by anamorphism. In *The Ambassadors*, anamorphism exposes the visual illusion of a Cartesian subject — who believes himself master of his visual world — through the representation of "an objective other in a field of pure monstrance."[12] The drawings of the film's slides and the corresponding mapping onto the space of the house indicate not one but many perspectives colliding in the field of vision. To compare the anamorphic drawings taken from the Eames' film with the anamorphic stain in *The Ambassadors* described by Lacan is to substitute an ahistorical gaze[13] representing both the look of others and the Other with one reproduced technologically.[14] The use of the still camera as a metaphor for the gaze was mentioned by Lacan in *The Four Fundamental Concepts of Psychoanalysis*, as he says:

> What determines me, at the most profound level, in the visible, is the gaze that is outside. It is through the gaze that I enter light and it is from the gaze that I received its effects. Hence it comes about that the gaze is the instrument through which light is embodied and through which … I am photographed.[15]

For Lacan, the gaze — subject to the ever-present possibility of being seen, of being caught in the act of looking — exerts all its authority like spot of light radiating in all directions. As he describes it:

> Light may travel in a straight line, but it is refracted and diffused, it floods, it fills — the eye is a sort of bowl — it flows over, too, it necessitates, around the ocular bowl, a whole series of organs, mechanisms, defences.[16]

If we apply Lacan's metaphor of the photographic camera as a gaze, disturbing the interior composition of the space, then anamorphism — in these drawings — is produced not by the displacement between the photographic camera and the eye, but between the photographic camera and the film camera (i.e. by their separation on a technical level). Moreover, when one analyses the film technique used by the Eameses and their group of collaborators, it is possible to find a direct relationship between the Lacanian diagram of the gaze and the eye.

This is because the rig, constructed as a solid base to hold the whole artifice (the camera, the slide, and the light) resembles Lacan's montage of look and gaze. The rig, placed over a table, holds at one extreme a Kodak SlideMaster slide projector as a source of light (as gaze) to backlight the slide being shot. On the other extreme, pointing back to the projector, is the film camera, a Mitchell standard 35 mm (the eye). In the middle (as a screen) is the colour negative slide held by a slip-in pocket addition to an old bombsight device. In this arrangement, the slide illuminates simultaneously with the light source while partially masking it, revealing the image to the film camera [fig. 3.30].

11 Slavoj Zizek, *The Ticklish Subject : The Absent Centre of Political Ontology*, Wo Es War (London: Verso, 1999).

12 Martin Jay, *Downcast Eyes : The Denigration of Vision in Twentieth-Century French Thought*, A Centennial Book (Berkeley: University of California Press, 1993), p. 364.

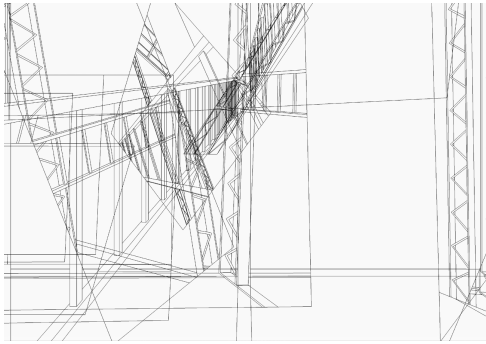
13 Kaja Silverman, *The Threshold of the Visible World* (1996).

14 At the end of Chapter 1.3 *A Mechanical Gaze*, I briefly refer to Kaja Silverman's *The Threshold of the Invisible World*, in which she proposed and explored the Lacanian Gaze, as that which is defined by the agency of a photographic camera.

15 Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, The International Psycho-Analytical Library (London: Hogarth Press, 1977), p. 106.

16 Ibid., p. 94.

3.29 — Hans Holbein's painting *The Ambassadors* (1533).



3.30 — View of the film 's mapping , from one of the camera's position

3.29 3.30

The cinematographer Alex Funke, who joined the Eames office years later and participated in the production of *Powers of Ten*, described the procedure used in *House: After Five Years of Living* as follows:

> To Photograph a 35mm slide (24mm by 36mm) onto movie film (.863 by .631 inches, or about 16 mm by 22 mm), you are making a moderate close-up of the slide. But once the camera to lens to slide relationship has been set, nothing has to move, it is a static set up. The movie camera is shooting one frame at a time, probably at about ¼ second exposure per frame. So as Charles sat at the rig, he could just hold the shoot button down until he had exposed the desire number of frames. The camera motor he would have used had a frame counter, so he knew exactly where he was[17]

This technique was used by the Eameses in many films from slides, like T*wo Baroque Churches (1955)* and *Day of the Death* (1957), but also in other future films with some technical improvements like a new technique to mask the slides in order to control their contrast. But the fundamental artifice was the same[18]. In 1968, discussing their work in *A Computer Glossary*, or *Coming to terms with the Data Processing Machine*, Charles says:

> Our Technique consists mainly of black-lighting the slides in our optical bench under very careful conditions…We mask the slides to control the contrast and the special development procedure that we have arrived at has a great deal to do with the final result. Our objective is to come up with a colour negative that will have exactly the same technical quality as our 'live footage', so that we can cut directly from on to the other without any shift in that quality[19]

The Lacanian montage of the gaze and the eye, and the mediation of the screen, seems to be technologically reproduced by the film apparatus. If Lacan describes the operation of the gaze as akin to being photographed, this is because he is referring to the arresting experience of being seized by the light. Thus, in the technical set-up, the eye is not copying the place of the photographic camera, rather that of the film camera, seeing light masked by the slides (the screens).

17 Funke.

18 Alex Funke confirmed that the whole montage of this artefacts briefly appears in the same film, *House: After Five Years of Living* (8 minutes, 14 seconds). The bombsight device to hold the slide however, is masked by a wooden panel.

19 Cinematographers American Society of, "A Computer Glossary," *American cinematographer.* 49, no. 2 (1968): p. 584.

In this sense, the mapping of the drawings onto the space of the house, can be read as the consequences of the technical dislocation produced by the return of the slides back into the space of the house and therefore, by the removal of the screen, revealing the light source of the gaze, disturbing the perspectival construction of each drawing. Even if we cease looking at the orthographic plan and rest our eye on a camera lens, the transparency of the drawings would make visible the perspective of any other drawing intruding into its field of vision. We could say that while the film seems to create a constant balance by its syntagmatic sequence and its paradigmatic 'dissolves', or between contiguity and substitution, the drawings seem to construct a paradigmatic unfolding, in which is possible to see simultaneously all the potential images that in the film sequence would appears one by one.

3.2.3. The Uncanny: Repetition and its Mortifying Gaze

If the gaze can be produced by a material practice, vision is regulated by the subject's being part of a social world[20], and by the new technological devices representing that world. To say that the Lacanian gaze can be instantiated by new media devices implies that their practices are shaped by an underlying (and unconscious) structure. These devices do not just construct new ways of seeing things, but through them, it is possible to animates unconscious and repressed desires. Thus, in *House: After Five Years of Living*, the reproduction of its interior using still photography and the flickering display of them on the screen, suggest a sort of repetition compulsion: the disturbing impulse to repeat an unpleasant experience consigned to the unconscious[21]. For Sigmund Freud, this experience works against the pleasure principle in the form of the death drive[22]. As Jean Laplanche and Jean-Bertrand Pontalis define it:

> At the level of concrete psychopathology, the compulsion to repeat is an ungovernable process originating in the unconscious. As a result of its action, the subject deliberately places himself in distressing situations, thereby repeating an old experience, but he does not recall this prototype; on the contrary, he has the strong impression that the situation is fully determined by the circumstances of the moment.[23]

For Freud, repetition compulsion is not just present in the neurotic, but extends to any other person as a compulsion with its origins in childhood experiences.[24] He gave as examples the dreams of shock victims and the play impulses in children in which the pleasure of play and the repetition compulsion are inextricably intertwined[25]. As he says:

> That which psycho-analysis reveals in the transference phenomena with neurotics can also be observed in the life of a normal person. It here gives the impression of a pursuing fate, a demonic trait in their destiny, and psycho-analysis has from the outset regarded such a life history as in a large measure self-imposed and determined by childhood influences.[26]

For Lacan, repetition compulsion (also called repetition automatism) is the insistence on the signifier as an unending struggle to regain what has been taken from the subject and cannot be regained. This is the *objet a*[27], the algebraic form of a "central lack expressed in the phenomenon of castration"[28]. For Lacan, repetition compulsion is symbolic[29], since it is not possible to attain an object that is permanently absent (*objet a*), except by representing it in some way — i.e. replacing it (another signifier).

20 Silverman.

21 Freud remarks that in the psychoanalytical experience, the task of the analysts is to "confirm the reconstruction" of the patient's memory through an act of transference. What is repressed however is not the unconscious per se, but the unconscious part of the ego, meaning what is repressed is in the ego and the patient's resistance is the avoidance by the ego of experiencing repressed impulses. Sigmund Freud, C. J. M. Hubback, and W. Ronald D. Fairbairn, *Beyond the Pleasure Principle*, The International Psycho-Analytical Library (1922).

22 It is the detrimental experience in which the subject positions herself repeatedly, re-enacting an early experience of which she is not aware. John P. Muller and William J. Richardson, *Lacan and Language : A Readers Guide to Ecrits*, Paperback edition . ed. (Madison, Conn.: International Universities Press, 1994), p. 91.

23 Jean Laplanche, J. B. Pontalis, and dawsonera, *Language of Psycho-Analysis* (London: Karnac 1988), p, 78.

24 Freud, Hubback, and Fairbairn.

25 Freud describes the game called *Fort/Da* played by his 18-month old grandson. The game involved a wooden cotton reel with a piece of string that the child held over the side of his cot; he then threw the reel saying 'o-o-oh' (meaning go away 'fort') and pulling it back with a joyful 'Da'. The game signified to Freud the disappearance and return of the child's mother, an unpleasant experience overcome by the child in the mother's necessary return to him. Ibid., pp. 12-13.

26 Ibid., pp. 22-23.

27 Jay, p. 362.

28 Lacan, p. 77.

29 John P. Muller and William J. Richardson, *The Purloined Poe : Lacan, Derrida & Psychoanalytic Reading* (Baltimore: Johns Hopkins University Press, 198.

And this is what governs the subject's behaviour. It is in the scopic relationship that *objet a*[30] is enacted by the gaze, as stated by Lacan:

> In the scopic relationship, the object on which depends the phantasy from which the subject is suspended in an essential vacillation is the gaze. Its privilege — and also that by which the subject for so long has been misunderstood as being in its dependence — derives from its very structure.[31]

Repetition compulsion has its origins in the pressure of the signifying chain, that is a series of signifiers linked together. In the signifying chain we found that the impulse to repeat is always represented by a contiguous relationship. In *House: After Five Years of Living*, a persistent tendency to repeat things can be observed. Thus, the constant stream of still images displaying the house from different angles, rotations and distances, is also the constant demand of a series of gazes — mechanically produced by the still camera — that returns to those viewing the film. Moreover, the slide projector, showing slides in rotation, can be seen as the mechanical equivalent of the signifying chain holding together a series of signifiers like so many photographs. But one of the most important consequences of the repetition compulsion is the death drive, or what Lacan refers to as *jouissance*, the excess of pleasure that returns to us in a painful manner.[32] It is perhaps not by chance that, as a record of domestic life, the photographs — organised to make up a film — seem part of an endless search for something never to be found, producing a level of optical anxiety that nevertheless oscillates between fascination and confusion, between visual pleasure and a disturbing acceleration. But for Lacan, the gaze above all means inertia, death:

> …It is that which has the effect of arresting movement and, literally, of killing life. At the moment the subject stops, suspending his movement, he is mortified. This anti-life, anti-movement function of this terminal point is the *fascinum*, and it is precisely one of the dimensions in which the power of the gaze is exercised directly.[33]

What we seem to see in *House: After Five Years of Living* is the constant tension between the fixation of the photographic image, its arrest by the eye, and thus its mortifying figure against the mobilisation and animation of the film sequence. Hence a tension between Freud's death drive and the pleasure principle. It is perhaps appropriate here to return to the discussion of the uncanny, because for Freud it is precisely the experience of repetition that is perceived as such; and in the film, it is exactly the confusion between the animate and the inanimate (an effect of the uncanny) that constitutes a visual representation of the house's interior. But if the uncanny is the return of the repressed, in the film the return has strong ideological overtones. The constant threat of a cold war, the traumas left by World War II, even the fear of an accelerated technological development, are then all masked and screened in a captivating visual and musical experience, expanding the hitherto stable boundaries of the domestic space.

30 Jay, p. 362.

31 Lacan, p. 83.

32 Dylan Evans, *An Introductory Dictionary of Lacanian Psychoanalysis* (London: Routledge, 1996), p. 91.

33 Lacan, pp. 117-18.

3.3. An Ideological Effect: The Screen and the Perspectival Image

The concept of *dispositif* in Media Studies was first used by the French philosopher Jean–Louis Baudry in two seminal essays, "Ideological Effects of the Basic Cinematographic Apparatus" (1970) and "The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema" (1975). In the former essay, Baudry focusses on the production of the cinematic image and its ideological effects.[1] Delving into its technical process, he suggested that, in the construction of the final cinematic image, there are a series of phases, changes, manipulations and alterations. If they remain perceptible to the viewer (as in Dziga Vertov's 'Man with a Movie Camera'), what is produced is knowledge "[…] as actualisation of the work process, as denunciation of ideology, and as a critique of idealism."[2] If, on the other hand, these procedures remain imperceptible to the spectator and the subject is deceived, there is an inevitable ideological effect produced.

Within the process of production, one of the main mechanisms that creates this ideological effect is the camera. Constructing an image out of a vanishing point (the organisation of the space inherited from the Renaissance), the camera locates a specific position for a viewing subject as a reflection of the perspectival image, for the vanishing point is also the mark that signals the position of an observer. For Baudry, this correlation "assures the necessity of transcendence…the subject is both 'in place of' and 'a part for the whole."[3] The subject is outside of the image, separated by its frame and distanced, but simultaneously belonging to it, as he is constantly called forth by the image through the vanishing point – a relationship that Hubert Damisch describes as a thread holding the eye of the subject to the vanishing point.[4] However, in cinema, images are not static, and perspective is always in motion – on the screen, there are a series of multiple vanishing points moving and changing constantly. For Baudry, these alterations are one of the most paradoxical situations in cinema. The moving image can only be created by concealing the slight differences between the stills from which it is constructed. That is, the almost imperceptible variations between the photographs spinning at twenty-four

1 Baudry draws upon Louis Althusser's concept of the Ideological State Apparatuses, in which a *dispositif* (apparatus) is always ideological from the point of view that replaces the subject's 'free' and 'conscious' ideas by material practices, which are themselves inscribed and promoted in a specific institution. Althusser calls this a 'reshuffle'. Thus, ideology is a process in which individual ideas disappear to re-emerge as practices defined by a particular institution; these practices create the illusion that ideas are individual and arise from the subject, when in fact they are part of an institutionalised mode of operation. Althusser distinguish between State Apparatus (SA) and the Ideological State Apparatuses (ISAs) in that the former achieve its purpose by violence, while the later does so by ideology. Louis Althusser, *Ideology and Ideological State Apparatuses* (2008).

2 Jean-Louis Baudry, "Ideological Effects of the Basic Cinematographic Apparatus," in *Narrative, Apparatus, Ideology : A Film Theory Reader*, ed. Philip Rosen (New York: Columbia University Press, 1986), p. 288.

3 Ibid., p. 242.

4 Margaret Iversen, "The Discourse of Perspective in the Twentieth Century: Panofsky, Damisch, Lacan," *Oxford Art Journal* 28, no. 2 (2005).

frames per second, are effaced on the screen, where they are reconstructed as continuous movement through the projector. Thus, Baudry writes that "projection is difference denied."[5] On the screen, the perspectival image is not fixed, but it is in constant flux. The concealment of a stable perspective liberates the subject from his fixed position in front of the screen. The moving image alters the placement of the spectator who is now, through a process of identification with the camera, a disembodied subject, whose eyes are replaced by the camera, participating in its movement. This participation transforms the viewer into a 'transcendental subject' — understood as a subject who is constantly located at the centre of the action, mastering the image through the authority of the vantage point.

For Baudry, the manifestation of the transcendental subject it is not only a result of the moving image on the cinema screen, but also of the construction of meaning arising from those images. Recalling Eisenstein's idea of montage — in which (like hieroglyphic writing) an image (single shot) acquires meaning when it is combined with other images in a sequence[6] — movement always demands that the subject interpret the sequence. The images are always completed by the presence of the spectator who assigns meaning to them. In this sense, the transcendental subject emerges as the place where meaning is restored, activated by movement and continuity. This restitution operates at two levels. On the one hand, through the repression of differences in the photographs that are projected as movement on the screen – this movement is only possible through the persistence of vision, inherent to the subject's optical condition. And on the other hand, through montage, where the narrative is produced; the cinematic image is not neutral, but an image endowed with meaning that, in the final instance, is constructed by the spectator.

3.3.1. The Exhibition

At the exhibition *Screening Domesticity*, forty-one shots of the Eames' film *House: After Five Years of Living* (1955) are selected and printed onto transparent acetate and acrylic plates [fig 3.31]. Placed at eye-level over a steel structure, the images — all of them from the interior of the house — reconstruct a section of the film sequence, re-enacting the transformations of the space produced by the lens of the camera. If a film, as a final product, entails the effacement of all its technical procedures (among them: *découpage*, film stock, montage, projection)[7], the Eameses' film extends that concealment to a particular technique used in its production – a series of shots in which the camera is not directly recording the space of the house, but rather, photographs taken during the first five years of its inhabitation.

What is interesting about the film is the paradoxical revealing and concealing of its technique and the cinematographic function. If, in a conventional film, movement is produced by the suppression of differences between the still images, in *House: After Five Years of Living* the still images seems to be just partially repressed. There is of course a suppression of the filmic slides in favour of its projection on the film screen. But the stillness of the image on the film screen suggest as kind of resistance by the slides that cancels movement. The twenty-four frames producing the projection of one second are identical pictures, there is no variation between them. From that point of view, the film reveals what it is supposed to hide – the stillness and the differences between one image and the following one. However, this is only partially true. In order to produce the screening of a second, a single image has to be photographed twenty-four times. If we consider the process of triplication demanded by the 'integral TripPak' used in *House*, (in which the entire colour image is created by dye layers within the film itself), each second is composed by seventy-two transparencies that, on the screen, are seen as one. In the Eames' film, there is a process of compression, what we see on the screen is a final surface, the squeezing of multiple images into one. What is supressed are not the variations between them, but the different layers that compose the final image.

The exhibition *Screening Domesticity* is a new kind of spatialisation of the image sequence, constructing a spatial performance of them — coincidentally recorded over transparencies. The forty-one photographs of the house are formed by three layers of acrylic plates located three centimetres away from each other and supported by a steel structure [fig. 3.32].

Although the materialisation of the film does not attempt to reconstruct the technical aspects of it, it does try to represent, at some level, its paradoxical condition of revealing and concealing. In the steel piece, this contradiction can be seen in the multiplication of the images in three layers and different levels of depth that, when looked at frontally, unifies the elements into a single image [fig. 3. 33].

Since the film is composed by photographs, it makes easier to analyse and identify the perspectival view constructed by the camera. At the exhibition, each image, represented over the steel structure, is manipulated and transformed. The photographs are not flat surfaces anymore but a geometric reconstruction of the vanishing points — translucent cones protruding from its surface — an ambiguous structure that translates the two-dimensional representation of the space into a three-dimensional construction of it. These geometric constructions overhang either in front of the images or to their rear.

The perspectival reconstructions started as an exploration of the different scales represented on the screen. The house and its objects are constantly re-sized on the screen depending on the position of the camera and the angle of it. Yet, it is not just the size of these elements that changes, but also the form of them; sometimes the angle of the camera is placed in such a way that parts of the house are distorted by an exaggeration of perspective. Thus, perspective in this work appears first as an impossibility to measure the variations of the scales — as the objects extend towards the vanishing point — and second, as a physical distortion of the space (which are materialised in the translucent geometries projected from the images).

In his book *Perspective as Symbolic Form* (1991), Erwin Panofsky relates different types of visual representations with the philosophical and metaphysical conceptions of the space to which they represented. Accomplished during the Renaissance, *Perspectiva artificialis*, stands as the final representation of a world in which objects and space are not disconnected unities anymore but a corresponding organisation of 'homogenous' elements. As Panofsky states: "Thus the great evolution from aggregate space to systematic space found its provisional conclusion. Once again this perspectival achievement is nothing other than a concrete expression of a contemporary advance in epistemology or natural philosophy."[8] Perspective, as we know it today, is not a faithful representation of the space, but rather a representation that faithfully resembles our present relationship with the world, (i.e., it is more a depiction of our relation to things, than it is an 'objective' way of showing them). According to Robert Romanyshyn perspective is a bond characterised by the placement of the subject as spectator and the world as spectacle.[9] Antique perspective in this sense (or old attempts of a faithful two-dimensional representation of the space) was not wrong or inexact. It simply depicted a different mode of relationship between the subject and the world: a perception that favoured (and is rooted in all) the human senses and is not just constrained to the optical one.[10]

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3.31 — shots of the Eames' film printed onto transparent acetate and placed between acrylic plates.

3.32 — View from below showing the three layers of acrylic supported by a steel frame.

3.33 — Film's slide looked at frontally.

3.33

5 Baudry, p. 291.

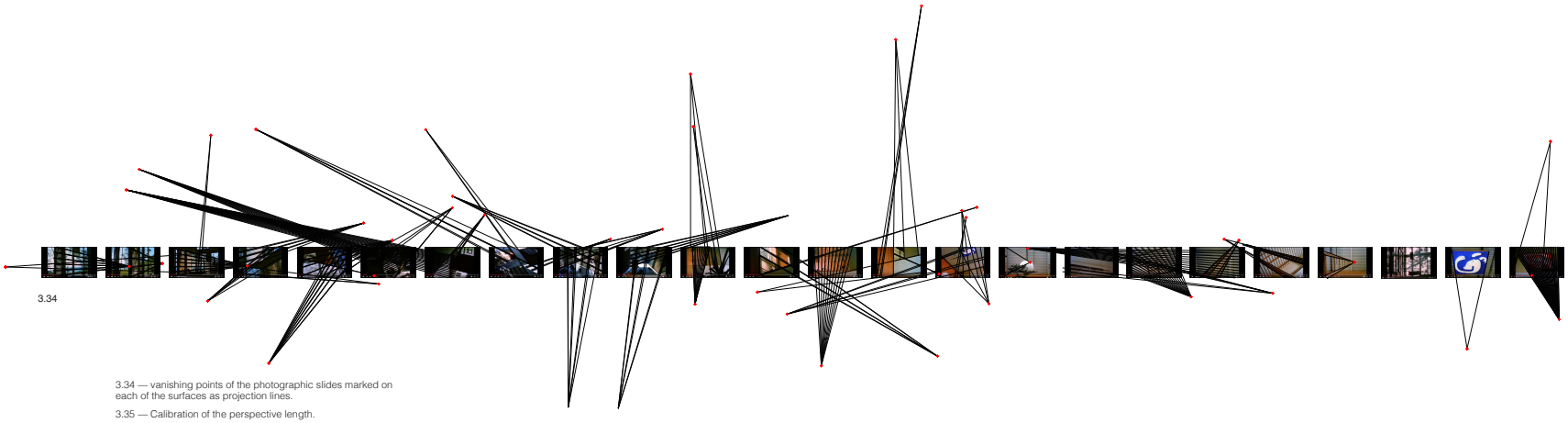
6 Sergei M. Eisenstein, Yve-Alain Bois, and Michael Glenny, "Montage and Architecture," *Assemblage*, no. 10 (1989).

7 Baudry.

8 Erwin Panofsky, *Perspective as Symbolic Form* (New York: Zone Books, 1991), p. 65.

9 Robert D. Romanyshyn, *Technology as Symptom and Dream* (London: Routledge, 1989).

10 It is multisensorial according to Romanyshyn since reality is depicted through the presence of the body in the mid of things ibid.



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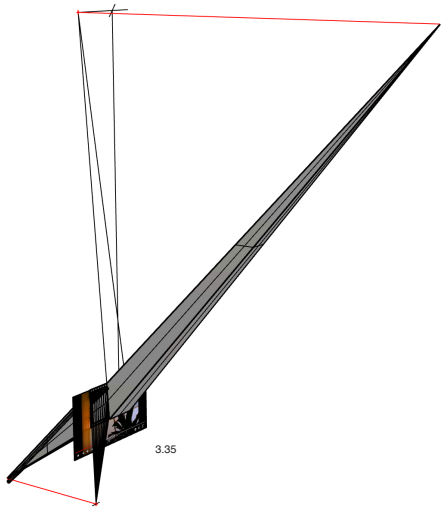

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3.34 — vanishing points of the photographic slides marked on each of the surfaces as projection lines.

3.35 — Calibration of the perspective length.

For Panofsky, perspectival space transforms the psychophysiological space into mathematical space. As he writes:

> …[perspective] negates the differences between front and back, between back and left, between bodies and intervening space ('empty' space), so that the sum of all the parts of space and all its contents are absorbed into a single 'quantum continuum'[11].

For him, perspectival construction, entails an objectification of the subjective, and in this process, perspectival construction allows "bodies to expand plastically and move gesturally."[12] At the installation *Screening Domesticity*, the perspectival unity is not broken but disturbed. The vanishing points of each photograph are recognised and marked onto its surface as lines of projection, sometimes extending outside of its frame [fig. 3.34]. This process of extrusion, was carried out first by taking the distance from the picture's frame to the vanishing point, and then through the rotation of that measure along the Z axis. This process of rotation, in which the vanishing point is three-dimensionalised, can be conveyed either in front or at the back of the picture [fig. 3.35]. In the model, the volumetric representation does not break the relationship between the elements within the image but rather produces an elastic extension of them. Although ambiguous, this extension is the visible resemblance of the camera's presence — its position, angle and its mode of address to the space — but also an optical manifestation of the subject's place in relation to that image, as the embodiment of his presence through the camera.

In cinema, perspective emerges as the tool by which the subject is at the same time distanced and attached to the image. Distanced because he is physically outside of that world, in front of it, protected by the frame that encloses the image, the screen. And attached because perspective is constructed *for* him and *from* him (he occupies the position of the camera).[13] In this ambiguity, the image produces a space for the subject who simultaneously extends his domain over it: perspective placed the subject in a position of mastery. The image is domesticated through its resemblance with the subject, it is framed, contained and tamed by the viewer's eye. In *Screening Domesticity,* this unitary relation is broken down by the model. The subject's position is multiplied and redistributed through the simultaneous visualisation of the images and the spatialisation of perspective which is projected out of the image — penetrating the visual field of other images, and disturbing its perspectival construction.

11 Panofsky, p. 31.

12 Ibid., p. 67.

13 For Baudry, the subject occupies the space of the camera. Then, he is situated in a double position: in the space where the image was taken (perspective is constructed *from* him), and inside the cinema theatre (perspective is constructed *for* him).

3.3.2 When the Screen is Pierced: The Gaze and the Threat to the Eye

In the *Four Fundamental Concepts of Psychoanalysis* (1977), Jacques Lacan uses the perspectival arrangement to introduce his theory of the gaze and the formation of the subject. Taking Sartre's idea of the gaze, Lacan distinguished between the function of the eye and that of the gaze at the level of the scopic field. For Sartre and Lacan, it is through the division of the eye and the gaze that the self is formed.[14] For Sartre, the gaze is something that surprises a subject in the act of looking; Sartre, places the gaze as an optical presence in which the subject (a voyeur) is caught in the act of looking. As Lacan writes:

> The gaze, as conceived by Sartre, is the gaze by which I am surprised — surprised in so far as it changes all the perspectives, the lines of force, of my world, orders it, from the point of nothingness where I am, in a sort of radiated reticulation of the organisms.[15]

Lacan describes Sartre's gaze as something that threatens the voyeur, that brings a feeling of shame on him, but that vanishes as soon as the subject sees this gaze: "In so far as I am under the gaze, Sartre writes, I no longer see the eye that looks at me and, if I see the eye, the gaze disappears."[16]

However, Lacan extends the notion of the optical gaze to the field of perception, as something imagined and perceived by the subject instead of something seen. As he asserts: "The gaze I encounter—you can find this in Sartre's own writing — is, not a seen gaze, but a gaze imagined by me in the field of the Other."[17] The Lacanian gaze antecedes the subject[18] and comes to be understood as the outcome of a process of 'alienation' in the early stages of childhood, generated when the subject abandons his pre-linguistic condition, gaining access to the symbolic order and social constitution. In this transfer, something is missed, a lost object (*object petit a*) that is removed from the subject through interdiction. The gaze for Lacan comes to represent a subject that is constituted through this extraction – a subject that is structured through lack and thus orientated by a force of desire. The Lacanian subject is intrinsically split.

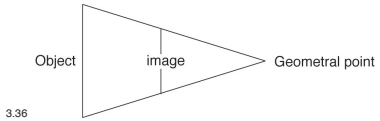
14 Jacques Lacan and Jacques-Alain Miller, *The Four Fundamental Concepts of Psycho-Analysis* (Harmondsworth: Penguin, 1991).

15 Ibid., p. 84.

16 Ibid.

17 Ibid.

18 Lacan refers here to Maurice Merleau-Ponty, as he says: "*I mean, and Maurice Merleau-Ponty point this out, that we are beings who are looked at, in the spectacle of the world. That which makes us consciousness institutes us by the same token as speculum mundi*", Further on the text, Lacan describes this relationship as satisfactory, as he points out: "The spectacle of the world, in this sense, appears to us as all-seeing. This is the phantasy to be found in the Platonic perspective of an absolute being to whom is transferred the quality of being all-seeing…this all-seeing aspect is to be found in the satisfaction of a woman who knows that she is being looked at, on condition that one does not show her that one knows that she knows". Ibid., p, 75.



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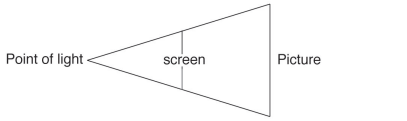

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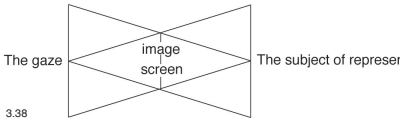

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3.36 — Lacan's diagram for the perspectival view emerging from the subject looking towards the object of perception.

3.37 — Lacan's diagram for the perspectival view emanating from the point of light (the object) toward the viewer.

3.38 — Lacan's montage. Both views are mediated by the image/screen.

3.39 — Looking at the steel structure from the side; all vanishing points collpase in a single volume. Sebastian Aedo.

This division is illustrated for him by two perspectival views: one emerging from the subject looking towards the object of perception [fig. 3.36]; the other emanating from the point of light (the object) toward the viewer [fig. 3.37]. Referring to the sardine can story — where a young Lacan is disturbed by both the reflection of a sardine can, floating in the sea while he was fishing, and by the comment of his fishing friend[19] — Lacan says:

> I am not simply that punctiform being located at the geometrical point from which the perspective is grasped. No doubt, in the depths of my eye, the picture is painted. The picture, certainly, is in my eye. But I am not in the picture.[20]

Recognising his absence in the picture (in the image he was seeing of the sardine can), Lacan claims to be part of it, to participate in its construction – the subject is also looked at by the object, he is also a picture. Almost overrating the perspectival relationship between the subject and the image, the detachment and the sense of mastery over it, Lacan proceeds to illustrates this resemblance between subject and object — a chiasmus between seeing and being seen — as a montage between the perspectival view of the subject and that of the object. On the one side of the superimposition, the geometrical point is now the place of the subject and the point of light is the gaze. Mediating these two is the image/screen [fig. 3.38], simultaneously a place of appearance and of masking. The screen intervenes between 'subject' and 'object', both making them visible and hiding them from one another.

The exhibition *Screening Domesticity,* can be seen as a materialisation of this montage, but also as a constant interplay between subject and object. The protruding cones transform the infinite space of the perspectival image into a finite and measurable geometric construction – the vanishing points are contained within the space of the gallery. The steel piece (the model) displaces the agency of the camera as the site from where the space is originated, organised and constructed. This is perhaps more evident when the structure is looked from the side; all the vanishing points shuffle in a single volume contained and condensed in a specific place [fig. 3.39]. The agency of the camera is interrogated by new and alternative viewing condition proposed by the model. There are moments in which the eye seems to be domesticated. When looking at the different photographs of the house, the eye can be trapped by the same perspectival construction of the camera. As if they

19 Lacan also realised that his presence contrasted with the one of his fisherman friends, who were used to that environment to earn their livings while Lacan was just having fun. This awareness produced in Lacan a sort of disturbance, he realised that that was not his placed, and that he was out of the picture there, just as the level of the scopic field, the eye (the viewing subject) is displaced in relation to light (the gaze).Ibid.

20 Ibid., p. 96.

were turned into an optical trap, the photographs 'swallow up' the look of the eye inside the geometric construction. By replacing the position of the camera, the eye is contained and trapped inside the protruding geometries [fig. 3.40]. But the eye in the installation, is also deceived. The infinite space suggested by the perspectival image is turned into a finite space that contains and supresses the authority of the human vision. However, in this interplay, the geometric cones of the model also emerge as a threat to the eye. Resembling a mirror image of the perspectival construction, some of the vanishing points folds-back toward the subject, who now faces the tips of the geometric construction, like spikes intimidating and arresting the eye [fig. 3.41].

This situation resembles Durer's famous engraving *Draughtsman Drawing a Recumbent Woman* (1525). In Durer's drawing, is through the fixation of the man's eye to a mini-obelisk (the superimposition between sight and the apex), what allows him to focus his view on both, the female figure and the gridded frame to construct a veritable perspectival image. At the exhibition, the apex of the vanishing points protruding in, and out of the picture, seems to transform its perspectival arrangement into the measuring tools used for its own construction.

Mediating this interplay between the introjection and projection of the perspectival construction is the pierced screen — the three acrylic plates punctured by the materialisation of the vanishing points. For Lacan, the screen is a surface that mediates between the subject and the object, a surface that can be manipulated and arranged by him. As he asserts:

> Only the subject—the human subject, the subject of the desire that is the essence of man—is not, unlike the animal, entirely caught up in this imaginary capture. He maps himself in it. How? In so far as he isolates the function of the screen and plays with it. Man, in effect, knows how to play with the mask as that beyond which there is the gaze. The screen is here the locus of mediation.[21]

Thus, the function of the Lacanian screen is the taming of the gaze, a protective surface that negotiates between the subject's sight and the object's gaze. For Lacan, this mediation follows a double function, on the one hand it protects the subject from the gaze, since to see the gaze means an encounter with the Real

3.40 — The eye looking at the photographic slides. The eye is contained and trapped inside the protruding geometries. Sebastian Aedo.

3.41 — Vanishing points folded back towards the viewer. the eye is intimidated the the tip of the cone.

— that which cannot be represented, is beyond language and escapes from the symbolic order in which the subject *qua* subject is situated. On the other hand, it allows the subject to see the object of perception, segregating and isolating the threat of the gaze.[22]

In materialising the film in the exhibition — its images, the perspectival view created by the camera and some objects (ladder and trusses) — the infinite and homogeneous space suggested by the camera is translated into a finite and fragmented space. In this turn, the new eye (the eye at the exhibition as a new optical experience), oscillates between moments of control (the whole steel piece is grasped by the eye), deception (the eye is contained inside the perspectival view) and threat (the eye is intimidated by the folding back of the perspective). In *Screening Domesticity,* the screen has been destabilised through its perspectival materialisation. The plethora of cones projected in and out of their frames is the place in which the confrontation between the camera's presence and the human vision is negotiated – that is, the place of encounter between the cinematic viewing condition and the optical experience of the exhibition.

21 Ibid., p. 107.

22 The Lacanian screen is opaque, in the sense that filters, that conceal while let us see what is beyond it. Lacan describes screen as follows: "If, by being isolated, an effect of lighting dominates us, if, for example, a beam of light directing our gaze so captivates us that it appears as a milky cone and prevents us from seeing what it illuminates, the mere fact of introducing into this field a small screen, which cuts into that which is illuminated without being seen, makes the milky light retreat, as it were, into the shadow, and allows the object it concealed to emerge." Ibid., p. 108.

3.3.3. The Mirror Effect: Deceiving the Eye, Turning Fragments into Wholeness

In the final part of "Ideological Effects of the Basic Cinematographic Apparatus," Baudry compares the Lacanian mirror-stage with the specularisation and the double identification of the subject with the screen-image inside the cinema theatre. For Lacan, a process of specular recognition is produced during the subject's early stages of development – between 6 and 18 months the child is for the first time able to recognise its own image in front of a mirror. The child — seeing itself next to its parent (using him as a referential point and as prompt) — identifies his own image in the mirror as a completed figure, contrasting with his experience as a fragmented body with motor incapacity and vulnerability.[23] This experience will split and mark the subject permanently, constructing an ideal *ego*: an exterior image with which the child identifies but that fails to correspond to his dis-unified body. Lacan calls this: *méconnaissance*, a false recognition that the subject finds first in his specular reflection, and later in the social world. Through the mirror-stage, the subject enters into the imaginary order, one of the three psychoanalytic structures defined by Lacan – the Real, the Imaginary and the Symbolic.

Based on the mirror-stage, Baudry claims two levels of identification take place in cinema. First, an identification with the main character in the film, one that conveys an identity that must be recognized.[24] And second — the one that makes possible the first — an identification with the camera (transforming the observer into a 'transcendental subject').[25] Even though Baudry is conscious that these levels of identifications differ from the Lacanian mirror-stage[26] — since what we see on the cinema screen is not our reflection, our own image, but something already given — for him, the optical operation behind the reconstitution of fragments (different images) into a whole (movement), function in the same way the mirror reconstructs the fragmented body. As he declares: "Just as the mirror assembles the fragmented body in a sort of imaginary integration of the self, the transcendental self unites the discontinuous fragments of phenomena, of lived experiences, into unifying meaning."[27]

Baudry constructs an analogy in which the function of the cinema screen resembles the Lacanian mirror-stage as a surface of encounter, where fragments are assembled in an imaginary integration.[28] Furthermore, in this restoration both subjects are deceived: the Lacanian one with a false sense of mastery, as Gestalt; and the cinematic viewer with the illusion of unity. On this rests the basic principle of the ideological effect: in cinema, the image projected in front of the viewer is only possible through the effacement of its technology and the labour that produces it – that is, through the concealment of its fragments and interruptions.[29] From this point of view, the installation *Screening Domesticity,* does not attempt to expose the film's technological machinery, but the representation of its inherent fragmentation and discontinuity. This interruption, can be seen in the separation between each photograph, its three layers of representation (the three acrylic sheets), the cutting-out of the perspectival view within each photograph, or the elements suspended and detached from the images — the piercing of the frame by the elements within it.

However, these fragments are partially restored by reflection. In the exhibition, a section of the steel piece is divided by a glass panel, part of the structure remains inside the gallery and part outside its space [fig. 3.42]. Both fragments are re-assembled by the reflections created on the glass surface. With the precise lighting condition — a condition also needed for the projection of a film — it is difficult to recognise where the steel structure ends. The structure merges with its own reflection and the eye is deceived [fig. 3.43]. It is no longer easy to recognise if what we see on the glass surface is a mirror image of the structure or the same structure that has penetrated to the other side of the panel. This ambiguity is reinforced by the fact that the same acrylic sheets, pass through (and are structured by) perpendicular acrylic sheets that multiply its reflections. There is a persistent ambiguity between the fragmentation of the images, and its representation as a single and continuous element. This mode of representation, can also be seen as a mimicking of the way in which the house built its relationship with the landscape, and the way it is displayed on the film screen – as a merging between landscape and structure, as a multiplication of the landscape on its surface, as an extension of the inside toward the outside, and as the ambiguity caused by the 'dissolve' technique.

At the exhibition, the film's photographs have been displaced by other screens. There is the glass panel dividing the structure, but also there are a series of acrylic panels underneath the fragmented photographs. These panels, contain the same photographs from where the different perspectival cones emerge. Here however, the images are not fragmented (cut-out) but complete. The vanishing points of each photograph are not spatialised but engraved, marked onto the acrylic sheet as a process of restitution and confirmation.

3.3.4. The Screen as Dispositif

In "The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema" (1975), Jean Louis Baudry refers in depth to the screening experience, and its subjective implications in cinema through the development of two concepts: *Appareil de base* and *dispositif*. The former referring to the whole apparatus and necessary mechanism to produce a film; and the later — as part of the *Apparel de base* — to the screening experience of the subject,[30]

For Baudry, the idea of cinema apparatus as a *dispositif,* entails moments of subjectification. The experience of watching a film — the dark room, the immobile subject, the projection of images, the split between our optical field and our spatial position, and the concealment of the projective mechanism — recalls or is anticipated by Plato's allegory of the cave. However, what is interesting about his comparison is not only the resemblance of some aspects of the allegory with the screening situation inside the movie theatre, but that both experiences (as *dispositif*) are able to create an 'impression of reality'. This means that both give the

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3.42 — Section of the steel piece divided by a glass panel, part of the structure remains inside the gallery and part outside its space. Sebastian Aedo

3.43 — The structure on the other side of the glass merges with its own reflection — the eye is deceived. Sebastian Aedo.

23 Jacques Lacan, *Écrits : A Selection*, Routledge Classics (London: Routledge, 2001).

24 This level of identification is not explored further by Jean louis Baudry, who focused on the viewing experience inside the cinema theatre and its ideological effects. An interesting proposal for this first level of identification (the identification with the main character) can be seen in Laura Mulvey's essay *Visual Pleasure and Narrative Cinema* (1975). Based on a feminist theory of spectatorship, Mulvey compares the *meconnaissance* in the Lacanian mirror-stage with a constant identification and misrecognition of the spectator with the characters on the screen. Thus, a level of identification is produced with the main (and male) character, who organises and control the narrative of the film (the story unravels around him). While simultaneously, a detachment and objectification of the female character is activated, who is subjected to the male look (by the main character and by the spectator of the film). Laura Mulvey, *Visual Pleasure and Narrative Cinema* (1999).

25 Baudry.

26 Baudry recognizes the two complementary conditions taking placed in the Lacanian mirror-stage — "immature powers of mobility and a preconscious maturation of visual organization" — present in the cinematic experience, the former as a restriction of mobility inside the cinema theatre, and the later as a prevalence of the optical function above other senses.

27 Baudry, p. 295.

28 Christian Metz states that the fundamental aspect of the Lacanian mirror-stage is not so much the restoration of fragments into wholeness, but the very reflexion of the child's and adult's image (father or mother) on the same surface of the screen. That is: a process of identification with the image reflected. In this sense, Metz, unlike Baudry, says that in cinema, this process of identification is not in the final image unfolded on the screen, but rather with the camera that produced it, with the projector that project it and in the last instance with the spectator that consume it. Thus, For Metz, the identification process in cinema, is with the subject himself, and not only with the camera. As he point out: " In other words, the spectator *identified with* himself, with himself as pure act of perception(as wakefulness, alertness): as the condition of possibility of the perceived and hence as a kind of transcendental subject, which comes before every *there is*". Christian Metz, *Psychoanalysis and Cinema : The Imaginary Signifier*, Language, Discourse, Society (London: Macmillan, 1982), p. 49.

29 The procedure of revealing a 'reality' that is only possible through the concealing of all the machinery that makes it possible is what Walter Benjamin, referring to film, called the "Equipment free-aspect of reality". As he declares: "The illusory nature of film is of the second degree; it is the result of editing. That is to say: In the film studio the apparatus has penetrated so deeply into reality that a pure view of that reality, free of the foreign body of equipment, is the result of a special procedure—namely; the shooting by the specially adjusted photographic device and the assembly of that shot with others of the same kind…Hence, the presentation of reality in film is incomparable the more significant for people of today, since it provides the equipment-free aspect of reality they are entitled to demand from a work of art, and does so precisely on the basis of the most intensive interpretation of reality with equipment". Walter Benjamin et al., *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media* (Cambridge, Mass.: Belknap Press of Harvard University Press, 2008), p. 35.

30 Frank Kessler, "The Cinema of Attractions as Dispositif," in *The Cinema of Attractions Reloaded* (Amsterdam University Press, 2006).

impression of experiencing the real world when, in fact, there is a series of imperceptible transformations and manipulations that makes that 'world' available to the viewing subject (the *dispositif* as an ideological device). If in Plato's cave the subject is haunted by the illusion — to the extreme of using violence to remain in that condition — in cinema, the subject is deceived into a state of pure satisfaction.[31]

This 'impression of reality', must not be confused with a faithful representation of it, but rather it should be understood as an illusion of reality created by the *dispositif* through the screening situation. This means, an 'impression of reality' is produced, not only when perception is sustained by representation, but also when the latter seems to slide under the former. In Plato's allegory of the cave, Baudry states:

> It is the apparatus that creates the illusion, and not the degree of fidelity with the Real: here *the prisoners have been chained since childhood*, and it will therefore not be the reproduction of this or that specific aspect of the reality, which they do not know, which will lead them to attribute a greater degree of reality to the illusion to which they are subject.[32]

Referring to Freud's "Interpretation of Dreams" (1913) and Lewin's concept of the *Dream Screen*, Baudry draws a parallel between the functioning of the dream and the Cinematographic Apparatus; suggesting that in both, an 'Impression of Reality' (as an illusion) is activated by a mechanism of regression to a state of pure satisfaction.[33] This regression, entails a confusion between perception and representation: a state that is found in the subject's early stages of development (governed by the primary process) where the split between body and environment is not clearly defined (a previous phase in the Lacanian imaginary and symbolic order). As Baudry points out: "The cinematographic apparatus is unique in that it offers the subject perceptions 'of a reality' whose status seems similar to that of representations experienced as perception."[34] The Cinematographic Apparatus for Baudry, recreates this state of regression, it simulates a former condition of the subject, one in which perception correspond with its representation. This mimic the effect produced by dream, where visualisation is marked as hallucination.[35]

For Baudry, cinema — more specifically its mechanism to produce and project the film and the viewing condition that entails — is as a trans-historical event, where narrative cinema (as the institutionalised mode of screening) emerges as the final accomplishment of an old subject's aspiration – the one of coming back to a state of pure satisfaction, where desire was fulfilled by hallucination. As Baudry remarks:

> It is desire as such, i.e., desire of desire, the nostalgia for a state in which desire has been satisfied through the transfer of a perception to a formation resembling hallucination, which seems to be activated by the Cinematographic Apparatus.[36]

In this regard, cinema is a machine that mimics, in optical terms, the very process of fantasy impelled by desire operating in the subject as hallucination. Referring to Tom Gunning's essay "The Cinema of Attraction[s]: Early Film, Its Spectator and the Avant-Garde" (1990), Frank Kessler proposes to expand the concept of *dispositif* toward other screening situations. In order to do this, he suggests historicizing the concept — distancing it from a trans-historical model, as in Baudry's view — attending to the relationship between technology, specific film forms, modes of address and the position of the spectator.[37] For Kessler and Gunning, the concept of *dispositif* should not refer exclusively to the specificity of the medium, but rather to expand toward the context in which the work was produced and is addressed to the audience.[38]

In this sense, the installation *Screening Domesticity* operates as an alternative *dispositif*, where the viewing condition is not determined by the film, but instead, by the production of other images. If the *appareil de base* of cinema requires the alignment of certain elements to operate as a *dispositif*: screen, dark hall, and projector/light/filmstrip; at the installation *Screening Domesticity*, these elements are replaced by the model, and thus, no alignment is produced. We are in a lighted space, and mobility is encouraged by the model — proposing different angles and modes of viewing. *Screening Domesticity* activates other modes in which the images perform, and thus, a new 'disposition' is created. Paradoxically, while the photographs of the film are de-framed, the installation produces its own images upon other surfaces. These images are not only about the photographs of *House*, but includes the ones created by the same model and the effect of natural and artificial light: its shadows and reflections. Thus, while puncturing the photographic screen, other screens are formed. Vision is not oriented towards a single surface, but to others within the gallery space, as floor, glass panels and ceiling [fig. 3.44]. There is not a single place from where to look at, but rather the viewer wanders around the images and the physicality of the structure.

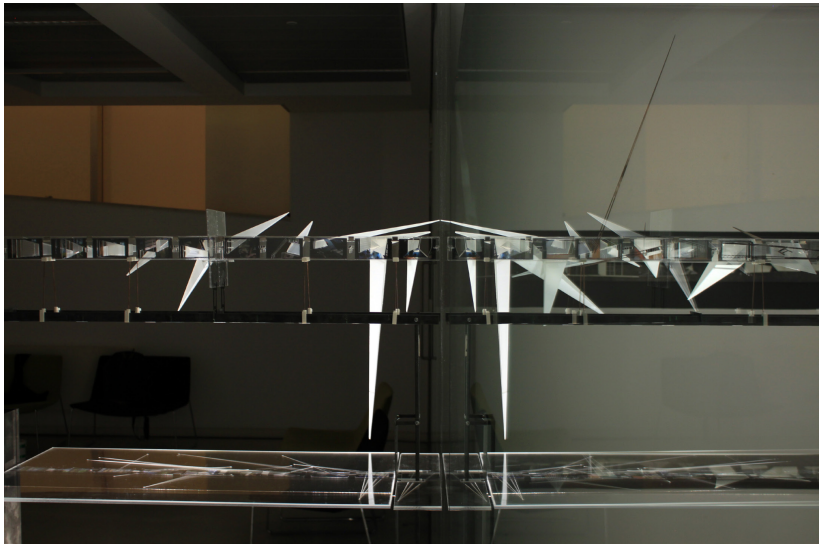
In this case, the problem of the *dispositif* relies on the possibility of recognising or extending a subjectification process — with its ideological consequences — that are no longer exclusive to narrative cinema, or even to the movie theatre, but to other viewing experiences and modes of screening. After all, the 'impression of reality' described by Baudry, depends on a subjective effect. What is interesting about Baudry's argument is that in both Plato's cave and the movie theatre, the viewing condition is established by the mediation of a screen. This mediation can be analysed in relation to the technology involved in it (in both production and reception), but also in how this technology is unfolded within a cultural, social and economic frame.[39]

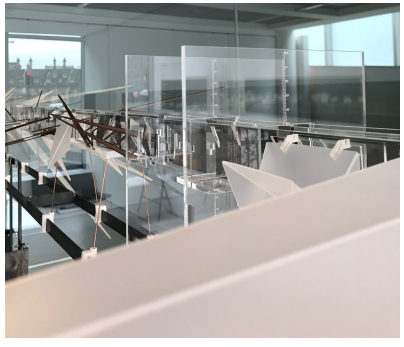
This is what Erkki Huhtamo suggests in his essay "Elements of Screenology: Toward an Archaeology of the Screen" (2004). Here Huhtamo proposes to historicize the concept of *dispositif* to expand it to other practices and technologies, but above all — and unlike Kessler — to its imaginary manifestations.[40] This is a key aspect in the work of Huhtamo, where the study of the relationships between the 'imaginary culture' and the material word is twofold. On the one hand, physical devices can boost the cultural imagination of society; on the other hand, the imagination that is produced can shape in return new technologies and devices — proposing a cyclical development of media artefact rather than the conventional view of a linear history of them. In this sense, the screen as a *dispositif* has the agency of building a frame of reference in which the subject is situated, but also — and almost unconsciously — the ability to be informed *by* the same context in which it operates.

3.44

3.44 — Vision is not oriented towards different surfaces in the gallery space, as floor, glass panels and ceiling. The view of the photographic slides is dispersed. Sebastian Aedo.

31 Baudry, "The Apparatus: Metapsychological Approaches to the Impression of Reality in Cinema."
32 Ibid., p. 305.
33 Ibid.
34 Ibid., p. 314.
35 Ibid.
36 Ibid., p. 314.
37 Kessler.The Cinema of Attractions as Dispositif
38 Ibid.
39 Erkki Huhtamo, "Elements of Screenology: Toward an Archaeology of the Screen," *ICONICS: International Studies of Modern Image* 7 (2004).
40 Ibid.





Photographs of the Exhibition *Screening Domesticity.* Tent Gallery ECA. Edinburgh. October 2017. Photographs produced by the author.

IV

4.1. A Media Glass Box

In the summer of January 2000, — a few months after the first episode of the television programme *Big Brother* was launched in Netherlands — two young architects, Arturo Torres and Jorge Christie, designed and placed in the centre of Santiago a three by four metre one-room glass house. The project, called *Nautilus*, for two became the house of a 21-year-old student actress called Daniela Tobar, who performed domestic routines in front of hundreds of passers-by and the media [fig. 4.1]. *Nautilus* was so named when one of the architects, Arturo Torres, witnessed the working conditions of women while devising a plan to renovate the red-light district in Santiago. As he explained: "*Nautilus* refers to a strip club in Santiago where nude women swim in large aquariums. Clients sit and drink in the dark, while the aquarium is brightly lit."[1]

Following a quiet first night, the project rapidly began to attract the attention of the media, resulting in a large number of people gathering outside the house. Most were men, forming a big group of onlookers and voyeurs that increased in number every morning when the actress had to take her daily shower [fig. 4.2]. The consequences of publicly displaying the domestic routines of a person to passers-by — testing the limits between the public and the private — seemed to be determined not just by the use of the domestic interior as a space for public performance or by the glass as a transparent object; but by the exposure of the female body: a representation of domestic routines superseded by the exhibitionistic fixation of her figure upon the glass surface of the house.

With a clear front facing the street and the back opposite a dividing wall, *Nautilus* became into a screen, a mediating surface between the female interior and the male exterior, between the private and the public, and between representation and reality. The precariousness of the domestic space[2] was simulated as a prompt for the construction and distribution of the body and the self, locating in situ her instant reception and confirmation.

4.1.1. The Cinematic Screen

What *Nautilus* seemed to reproduce from the street was a particular viewing condition, one facilitated by a collective act of voyeurism towards the confined woman behind the glass surface as the object of their gaze. Thus, it is possible to talk about certain cinematic view of the object, which, although activated in the public space

1 Sarah Bonnemaison and Ronit Eisenbach, *Installations by Architects : Experiments in Building and Design* (New York: Princeton Architectural Press, 2009).

2 The architects, Arturo Torres and Jorge Christie, thought the project could incite the fury of certain extreme groups so they decided to use tempered glass in case the project were stoned. But while the glass became a very expensive material, the interior was extremely simple and rudimentary. Arturo Torres, interview by Sebastian Aedo, September, 9, 2019.

4.1

4.2

4.3

4.4

4.1 — People gather in front of *Nautilus* glass house. Photograph taken from Iglesia de las Agustinas's across the street. Photograph by colectivo Uro1.org.

4.2 — People gather in front of Nautilus glass house to see the actress' mornig shower. Photograph by Jorge Christie. colectivo Uro1.org

4.3 — Tobar and a friend draw the attention of the vouyeurs outside Nautilus. unknown author.

4.4 — Las Agustina's church stairs, used as vantage point to look at *Nautilus*. Arturo Torres.

of the city centre, seemed to reproduce specific types of disposition between the spectator and the screen. In this sense, when discussing the voyeuristic experience in cinema, Christian Metz says:

> It is enough, and it is even essential — this is another equally well-defined path of gratification — that the actor should behave as though he were not seen (and therefore as though he did not see his voyeur), that he should go about his ordinary business and pursue his existence as foreseen by the fiction of the film, that he should carry on with his antics in a closed room, taking the utmost care not to notice that a glass rectangle has been set into one of the walls and that he lives in a kind of aquarium[3].

In an interview[4] the architects explicitly referred to Philip Johnson's glass house and Mies Van der Rohe's Farnsworth house as not sufficiently modern: both placed in large private property in the middle of nature and outside the urban context. Thus, *Nautilus* was located in the city centre, surrounded by buildings, streets, and people. But while the glass architecture of modernism brings the exterior landscape into the interior — according to Philip Johnson, as if it were an expensive wallpaper[5] — *Nautilus* does the reverse. It transforms not only the contexts in which the emblematic glass houses of modernism are placed, but also their introjecting condition, as if it were a screen projecting its interior towards the exterior.

The house framed the female body as a spectacle in manifest complicity with the male voyeur in the public exterior, transforming the domestic space into a gendered object, an image, a viewing apparatus, and a screen activated under uneven modes of visuality.[6] Thus, *Nautilus* produced a cinematic experience whose narrative revolved around the objectification of the female character by the male gaze projected towards the glass screen.

This situation seems to reproduce the male gaze in cinema, a viewing condition based on psychoanalytic theory proposed by the feminist film theorist Laura Mulvey. In her influential essay "Visual Pleasure and Narrative in Cinema," Mulvey describes how viewing conditions within the cinema converge in two paradoxical positions. First, there is scopophilia, which is the visual pleasure caused by viewing a person as an object of desire, and, second, there is the identification of the observer with the image seen. Thus, the viewing condition constantly interplays between moments of objectification and moments of identification, mimicking the function of the ego's formation at play in the Lacanian mirror stage.

For Mulvey, these two conditions are mediated first by the camera, which is used by the film director to construct a series of different looks between the actors and between the actors and the screen, and, second, by the sex of the character. Because the actress, in psychoanalytical terms, represents the threat of castration, her presence is always marked by the anxieties she signifies. Thus, it is through identification with the male character as the ideal ego that the spectator constantly seeks to control and possess her — objectifying her presence on the screen.

In *Nautilus*, the objectification that results from the male gaze, described by Mulvey as a cinematic viewing condition, seems to be stimulated every time a male figure appeared inside the house. The number of voyeurs on the street increased, raising their anxiety to see themselves as the desiring subject of the actress or to perhaps watch sexual content in a society intellectually and sexually repressed during the years of dictatorship [fig. 4.3]. *Nautilus* can be viewed as an uncanny manifestation of something that ought to remain repressed, hidden, or concealed yet somehow returns to the subject as a traumatic experience, unexpectedly released. In *Nautilus*, we can identify her performance as trauma, which interplays between her presence as an object of desire and as a threat — as corrupting morality and decorum (good manners). This situation is manifested by the XIX century church across the street from the house, which was used as a vantage point, raising the indignation and offending the sensibilities of many Catholics. [fig. 4.4]

But for Mulvey, one of the ways the male unconscious must deal with the repressed — symbolised by the castrated female actress — is through domination of the original trauma and sadism. In film, this is resolved in the narrative through demands for punishment or forgiveness of the guilty. In this sense, in *Nautilus*, Tobar had to move out before the scheduled time of two months.

3 Christian Metz, *Psychoanalysis and Cinema : The Imaginary Signifier*, Language, Discourse, Society (London: Macmillan, 1982), p. 96.

4 Bonnemaison and Eisenbach.

5 Emmanuel Petit and Beatriz Colomina, *Philip Johnson : The Constancy of Change* (New Haven: Yale University Press : In association with the Yale University School of Architecture, 2009).

6 It is not just that the project constructed the visual conditions in which hundreds of people explicitly watched the domestic routines of one female actress, or that her routines were at times erotically charged. It was that, throughout the whole performance, the actress was constantly simulating being unseen. Thus, she was pretending to carry out her daily task as if she were in her own home, unaware of the hundreds of voyeurs outside on the streets. This has the effect of constructing asymmetrical modes of view, one explicitly invasive, the other passive and constantly eluding its confrontation.

At one point, a man threw a stone at the glass, others shouted at her at 5:00 in the morning, many harassed her every time she left the house, and some attempted sexual assaults were reported. All these actions were constructing a daily narrative that created tension within the relationship between voyeurs, the exhibitionist, and the media. But to suggest that Mulvey's male gaze can operate in an architectural object, is also to suggest that the camera — as the main apparatus by which the gaze is articulated — becomes dispensable. Moreover, in *Nautilus*, it seems to be that architecture is what operates as both, camera and screen. This is, it is the glass screen what also proposes a fixed frame, a unique scale, a specific distance between image and viewer.

4.1.2. The Domestic Interior: How to be Modern

According to the main architect, Arturo Torres, the purpose of the project was to generate a cultural confrontation with the idea of modernity, which for him in Chile, is usually confused with technological development overlooking its cultural aspects. Thus, for Torres, modernity implies not only technological transformations but also cultural ones. In exposing the body of a female actress carrying out her domestic routines, Torres sought to reveal the unbearable cultural backwardness of Chilean society, and thus its un-modern condition. If this was the case, then the domestic interior appears to serve as a backdrop against which the female body is exposed in the context of an art installation. Architecture is instrumentalised as a medium through which the visual culture of a given society is tested and confronted. However, while *Nautilus* proposes that, to be really modern, the domestic space should be placed in the city centre, it appears to ignore a more recent debate about the early twentieth century media practices that also penetrated its production.

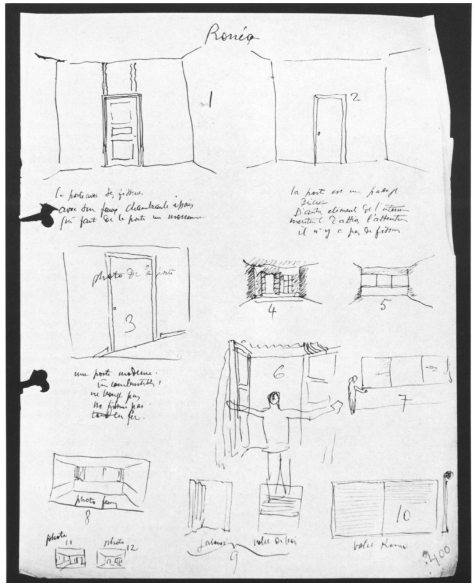
This idea has been largely discussed by Beatriz Colomina, in her book *Privacy and Publicity, Modern Architecture as Mass media*, for whom modern architecture — or more precisely its domestic interior — was redefined by the increasing expansion and penetration of mass-media into architectural production. Thus, modern architecture is not just represented in the media, it has also absorbed media practices and new systems of representation in the design of its interiors. As Colomina observes: "Modern architecture becomes modern not simply by using glass, steel or reinforced concrete, as is usually understood, but precisely by engaging with the new mechanical equipment of the mass media: photography, film, advertising, publicity, publications, and so on."[7]

Colomina recognised this integration of technological media in, for example, an infamous debate that took place in 1920 between Auguste Perret and Le Corbusier about the form, size, and function of the window. Through a series of public letters and publications, Perret claimed the *Porte-fenêtre* — the vertical window — was the proper and only type of window that can fulfil its true purpose: "to illuminate, to let light into an interior"[8] in stark contrast to Le Corbusier's windows [fig. 4.5]. For Le Corbusier, Perret's declaration failed to acknowledge the technological advance within his own enterprise, reinforced concrete, which allows the window to be 'adapted in turn to new human functions', and to be mass-produced — working as "precision machines."[9]

This public debate was not limited to a discussion about its technical or aesthetic consequences, it expanded to consider the more substantial effect on a viewing subject and the influence exerted by old and new systems of representation in the construction of a new viewing condition.[10] In effect, according to the architect Bruno Reichlin, the debate can be 'framed' as one between Perret's defence of the traditional representation of perspective in western art and the construction of depth; and Le Corbusier's inclination towards modern painting, which flattened perspectival depth.[11]

However, for Colomina, Le Corbusier's understanding of the window is not based so much on a pictorial movement as on the influence of technological media penetrating the domestic interior. For her, Le Corbusier's windows responded to the space inaugurated by photography. She sustains her argument by highlighting Le Corbusier's use of the photographic apparatus to "scientifically"[12] demonstrate that horizontal windows illuminate more than Perret's vertical windows. Her argument rests on the claim that it is the movie camera (and here she seems to forget about photography) that dissolves the unique centre constructed by perspectival representation; a dispersal that takes place in Le Corbusier's windows. She based her argument on the description of a drawing of a window by Le Corbusier that, she says, "suggests a series of photographs placed next to each other in a row, or perhaps a series of stills from a movie."[13] The window, unequivocally compared to both photography and the cinema screen, constructs framed views of the exterior. For Colomina, this suggests a new epistemological divide between a painterly perspective and photography, where the immobile and fixed eye implied by the former is replaced by the constant flux of the cinematic image (understood by her as a collection of still slides).

Thus, if media practices such as photography and cinema informed in the construction of a new domestic interior — one that organised space in relation to a mechanical eye (the photographic camera) — it is pertinent to ask what kind of media practices were shaping *Nautilus* in the year 2000 as both performance and architecture. Although they are not mutually exclusive, the former perhaps points towards its subjective motivations while the latter points towards the medium by which these motivations are accomplished. Moreover, following Colomina's line of thought, if, in Le Corbusier's architecture, "Separation from the outside is provided by the window's ability to turn the threatening world outside the house into a reassuring picture,"[14] then it might be possible to talk about a different divide. One that returns the look from the window, transforming the 'reassuring picture' into, at least most of the time, an enjoyable look penetrating the interior. *Nautilus* cannot be comprehended outside the new technological media and practices of representation at that time, which are widely different from those described by Colomina at the beginning of the twentieth century that construct a specific sense of space and subjectivity.



4.5 — Le Corbusier, 'Roneo' drawing, illustrating the advantages of the *fenetre en Longueur* over Perret's vertical window. Beatriz Colomina "Le Corbusier and Photography."

4.1.3. Media Technology and The Distribution of the Self

A few years prior to *Nautilus*, the webcam was introduced to the market. Independent of television, it allowed live content to be broadcast onto the web. Thus, in April 1996, 19-year-old Jennifer Ringley attached her webcam to the computer screen and began to stream on-line content of her private life from her college-room in Pennsylvania, 24 hours a day, 7 days a week. The technology available at the time only allowed content consisting of black and white images that were refreshed every three minutes. Rather than moving images, as one might think, the first version of the Jennicam — as it was known — provided viewers with photographic shots that alternated moments of concealment and exposure; to gain visual access to her room was not an easy task. At her official website www.boudoir.org, where visitors could access these online images, Ringley also took the time to reply to some of

7 Beatriz Colomina, *Privacy and Publicity : Modern Architecture as Mass Media* (Cambridge, Mass. ; London: MIT Press, 1994), p. 73.

8 M. Auguste Perret, quoted in Anne Friedberg, *The Virtual Window : From Alberti to Microsoft* (Cambridge, Mass. ; London: MIT Press, 2006).

9 Le Corbusier, ibid.

10 Ibid.

11 Bruno Reichlin, "The Pros and Cons of the Horizontal Window: The Perret-Le Corbusier Controversy," *Daidalos* 13 (1984).

12 Colomina, p.133.

13 Ibid., p. 139.

14 Ibid., p. 7.

their questions. In one of them, concerning the 'reality' of what is seen through the webcam, Ringling replied: "I never know when the camera is going to take the picture, so I have no time to prepare, I never feel the need to hide anything going on anyway."[15]

Most of the time she was not in her room, and when she did appear, she was either studying on her bed, looking at the computer screen, brushing her teeth, or just sleeping.[16] But this mundane routine was also occasionally interrupted with erotic and pornographic content such as a striptease and explicit sex. Technology was helping to fulfil desires for voyeurism and exhibitionism, as more than 4 million[17] viewers connected daily to watch Jennifer's routines inside her room [fig. 4.6]. As the number of voyeurs increased, she begun to charge for premium access after adding three more webcams to her room following a move to Washington, D.C. in 1998. Thus, media has helped to blur the limits between the private and the public space. Furthermore, within this distortion of what is inside and what is outside, the domestic space was also being reproduced, modified, and streamed into the public as a backdrop for the distribution and confirmation of the self. In a radio interview transmitted after her graduation, Ringley stated: "Even though there's nobody actually there with me, even though I'm still alone, even if there is nobody watching the camera from the other end, it is just comforting to know that there is somebody metaphorically out there."[18] If in *Nautilus,* Tobar's performance was visually confirmed through the presence of hundreds of voyeurs outside the house, the one concerning Ringley was through the domestication of them; in their presence manifested through their absence.

A year later, on August 22, 1997, the artist and performer Ana Voog launched her own version, the 'Anacam' and, unlike Ringley, claimed from the beginning that what she was doing was an artistic practice. Moreover, her presence in front of the camera usually included her body as a site for artistic expression, which involved using her own image to experiment with the media technology available at the time, applying filters, colours, text, different resolutions, and scales[19][fig. 4.7]. The webcam thus transformed the seclusion and intimacy of the room into a place to project our desires.[20] The JenniCam and Anacam were part of a series of early attempts in which new media devices and technologies penetrated the privacy and the seclusion of our domestic spaces, not as receptors of images — as images from the outside world entering into the privacy of our homes — but as the emission of our own private interior, thus transforming the insertion of the private into the public.

These new media practices, developed alongside the future production of new reality programme genres[21] on television, aiming to depict the *real life* of *real people*.[22] This was made easier by the portability of digital video cameras and the new technology available for video editing, which allowed audio-visual material to be produced faster and more cheaply.[23] The new technology used to record voice, and the available digital knowledge, enabled images assembled in a short period of time to be disseminated over different platforms, such as the internet or via television.[24]

Thus, the dystopian society described by George Orwell in his novel *Nineteen Eighty-four* — where a totalitarian regime is maintained by the permanent surveillance of tele-screens and the ubiquitous eye of the head of the Party, *Big Brother* — was reformed as a new idea for a television show. It was September 1999, and the first version of the reality television programme *Big Brother* was launched in the Netherlands. The programme consisted of a group of strangers living together inside a semi-domestic space especially designed for the show. Dozens of cameras recorded their daily routines, which largely revolved around the personal conflicts emerging from their seclusion. Due to its immense success, the franchise has subsequently been re-produced and adapted to the local context in more than 47 countries.[25]

15 Victor Burgin, *The Remembered Film* (London: Reaktion, 2004), p. 45.

16 "Jennicam: The first woman to stream her life on the internet", accessed 23/10/2018, https://www.bbc.co.uk/news/magazine-37681006

17 Huges Hart, "April 14, 1996: Jennicam Starts Lifecasting," Wired magazine. https://www.wired.com/2010/04/0414jennicam-launches/ (accessed Agust 12 2019).

18 Jennifer Ringley, interview by Ira Glass, 6 June 1997. Tales from the Net. Retrieved from: https://www.thisamericanlife.org/66/transcript [accessed on August 20th 2019]

19 Emma Maguire, *Girls, Autobiography, Media: Gender and Self-Mediation in Digital Economies* (Cham: Springer International Publishing, Cham, 2018).

20 Brooke A. Knight, "Watch Me! Webcams and the Public Exposure of Private Lives," *Art Journal* 59, no. 4 (2000).

21 Even though there seems to be no consent in media studies over a proper definition for reality genres, I refer here to any programme that overtly claims to be 'real' in its discursive and visual production. See: Su Holmes and Deborah Jermyn, *Understanding Reality Television* (London: Routledge, 2004), p. 5.

22 Ibid.

23 Jonathan Bignell, *Big Brother : Reality Tv in the Twenty-First Century* (Basingstoke: Palgrave Macmillan, 2005).

24 Ibid.

25 ibid.

Big Brother provides a good example of the way in which the self is not just distributed, but is deliberately constructed through the media. The participants compete for the approval of their peers and also for the millions of spectators who are watching them on television, voting for their continued presence inside the house.[26] Thus, part of their performance in the programme involved a constant effort to adapt their personalities to please their audience and thus remain in the competition. In the third season of *Big Brother* UK (2002), one of the competitors, Tim, who explicitly reveals on camera his wish to leave the house, stated in a later interview:

> The whole time I was there I was very much myself. I don't think my whole personality came out because there wasn't much to stimulate a lot of it…but there were a lot of people in there who I'm convinced are not like that in their normal life.[27]

For the media theorist Nick Couldry, reality television programmes such as *Big Brother* are characterised by a constant tension between two unresolvable contradictions. On the one hand, it is expected by producers, that being surrounded by cameras within the confined space of a quasi-domestic setting will, sooner or later, reveal a person's 'true self' (based on the assumption that this can be easily determined).[28] On the other hand, if this 'true-self' does not satisfy viewers and producers then it will inevitably lead to eviction.

To remain on the show, the competitor has to agree not only to cohabitate but to also willingly share their 'inner thoughts' and experiences in a series of "therapeutic confessions."[29] The ongoing disclosure of inner feelings and thoughts in front of the television screen — a recurring practice utilised by many reality shows — can be viewed, according to the media scholar Jon Dovey, as the consequences of the changing conditions of both the public and the private spheres. Writing in 2000, Dovey locates the recent incorporation of 'first person media' into factual television as a practice that has become increasingly common since the 1990s.

4.6

4.7

4.6 — Jennifer Ringley's routines inside her room.

4.7 — Ana Voog's performance.

26 Endemol, accessed 30/10/2018, http://www.endemolshinedistribution.com/big-brother-formats/

27 Susan Murray and Laurie Ouellette, *Reality Tv : Remaking Television Culture* (New York, N.Y. ; London, England: New York University Press, 2004), p. 69.

28 John de Mol, the cofounder of "Endemol Productions" (The owner of the Big Brother franchise among others) has argued that even the most resolute participant would find it impossible to mask their personality for more than two weeks. Anita Biressi and Heather Nunn, *Reality Tv : Realism and Revelation* (London ; New York: Wallflower Press, 2005), p, 20.

29 Ibid.

Shaped by a new understanding of the 'public' — which has been reconsidered under the constant practices of commodification and consumption — the institutionalised broadcasting network has shifted its attention from a public-oriented service media towards a more market–oriented media. Consequently, television becomes the arena for reconciliation and differentiation between the individual and the collective, and thus between self-expression and collective identification. For Dovey, we live in a confessionary society that has created new spaces for the "expression of identity… celebrating their own freakishness, articulating their most intimate fears and secrets."[30]

In *Big Brother*, the confession of inner thoughts and experiences occurs not just between the participants, they are literally constructed in the *diary room* [fig. 4.8]— a small chamber in which each participant has the chance to talk with the narrator of the show who impersonates *Big Brother*. These instances of dialogue occur either at the request of the competitor or in response a direct call from *Big Brother*.

4.8

4.8 — The *diary room. Big Brother's UK version 2011.*

The story circulates around the self and his/her inner revelation, an important component of the show that is appropriated by producers to assign meaning and veracity to the story.[31] In *Big Brother,* the revelation of a self seems to involve a constant interplay between the daily relationship established with other competitors and the one built within the *diary room*. Notably, the confessional element of the show not only points towards the self-disclosure of the participant, but to the viewers as recipients of their confession. The *diary room* places the camera directly in front of the participant's faces; thus, when we are witness to their dialogue with *Big Brother,* we are in fact (as viewers) impersonating *Big Brother*, we become its gaze, judging their thoughts and their authenticity. Voting in favour of or against them, the competitors find, through the television cameras, a new medium through which their self can perform, and, in the interactive nature of the show, the opportunity to test this self; to see whether it is approved or rejected by the viewers.

In this sense, the camera becomes — most of the time — a welcoming, pleasant, and even comforting gaze confirming our very existence as beings. As the webcam performer Ana Voog explains: "if you wake up in the middle of the night or something with an anxiety attack, it's really nice to know people from all over the world are all there, to comfort you or talk about anything you want. it's just really cool."[32] Reality television shows absorb new practices of representation and become part of a broader phenomenon in which identity finds new media for its self-confirmation and for its exploration and promotion. On the other side of the screen, you can reconstruct yourself. The Lacanian gaze, as that which returns our look as a threatening penetration of the *real* into the *symbolic*, becomes — metaphorically embodied in the television camera — an opportunity to play with the self, to construct a new identity through media exposure. The camera becomes the possibility of a reassuring look, confirming rather than destabilising our being, even though there is always a window, a threshold in which the captivating gaze becomes an unbearable disturbance.–

Big Brother unfolds in a very controlled and regulated space in which contact with the outside world is extremely limited. The house was a rare experiment in which the vast amount of technology deployed to produce a daily show — permanently gathering and editing images of its interiors — contrasted with the un-mediatised environment of its inhabitants. Inside the house there were no televisions, mobile phones, radios, computers or, of course, access to the internet. The everyday life of participants, used for mass media, was completely isolated from its systems. Furthermore, at least in the first version of the show, the competitors had to produce their own food in a back-to-basics style of living.[33] As the media scholar Mark Andrejevic notes: "The *Big Brother* house thus became a mass media experiment in watching people deprived of the mass media."[34] The competitors were constantly surveyed by the remote-controlled cameras concealed behind one-way mirrors, as if in an interrogation room, and even the slight notion of privacy the darkness of the night could provide was disrupted by night-vison cameras.

4.1.4. Media Convergence: The Reception of the Self

Nautilus opened-up a series of debates about the insertion of the private into the public, the excessive use of glass as a form of inhabitation in an urban context, and the relationship between the domestic space and the media, all of which heightened desires for exhibitionism, surveillance, and voyeurism. The term media, understood as the institutionalised circulation of photographic, filmic and televisual content, was a medium whose format was increasingly being modified by the rapid development of new technology, an emerging media that was now in circulation.

New video consoles, such as the Sony PS2 that plays DVD movies, began challenging the way we spent time in front of the television. The use of the internet spread worldwide, while new devices that facilitated the reception of cable and satellite television were expanding the alternatives for consumption. TiVo, the first digital video recorder (DVR), had recently been launched onto the market (1999), permitting users to record their favourite programmes and find new ones according to their preferences — locating what they wanted in "a chaotic, fragmented media landscape."[35] The proliferation of new portable devices such as laptops, mobile phones (the first camera phone was introduced by Japan's SoftBank on November 2001), and media players such as the iPod — released onto the market on October 2001, meant that the ownership of such items became increasingly common. Supporting the function of these devices, there was an exponential growth in new software technology that facilitated the sharing and dissemination of media content with other users, including MSN Messenger (launched July 1999), Napster (September 1999), iTunes (January 2001), and BitTorrent (July 2001), all of which helped to fulfil people's dreams of portability and connectivity.

These were times of media convergence, where technologies to delivery media content were being modified. Contrary to what is usually understood, convergence is not simply about the incorporation of one media technology into another novel version of itself, or the convergence of different technologies in an all-encompassing media artefact. It points towards exactly the opposite: the convergence of media content into different platforms. Thus, media convergence produces "different devices and practices"[36] where information can "cascade from device to device, seeking you out"[37] — promising a more participatory and interactive mode of spectatorship or experience.

The term media convergence is usually defined in relation to the work of Henry Jenkins who, in his book *Convergence Culture*, views the media not so much through the lens of it technological features but more as a "cultural system."[38] Referring to the media models developed by the historian Lisa Gitelman, Jenkins defines media as both "a technology that enables communication"[39] and as "a set of associated 'protocols' or social and cultural practices that have grown up around that technology."[40] Therefore, for Jenkins, technology as a 'delivery system' constantly erases or renovates itself, while media as a "cultural system" becomes entangled into an ever more complex information "stratum." Thus, Jenkins defines Media Convergence as:

> The flow of content across multiple media platforms between multiple media industries, and the migratory behaviour of a media audience who will go almost anywhere in search of the kinds of entertainment experiences they want.[41]

Each new version of *Big Brother* comes not only with new participants and challenges but with the engagement of new media platforms that permit other modes of dissemination and interaction between the spectators and the programme. For its fifth version in the UK (2005), viewers were given the chance to pay for exclusive

30 Jon Dovey, *Freakshow : First Person Media and Factual Television* (London ; Sterling, Va: Pluto Press, 2000), p. 4.

31 Heather Nunn and Anita Biressi, *Reality Tv: Realism and Revelation* (Wallflower Press).

32 Burgin, p. 117.

33 Mark Andrejevic, *Reality Tv : The Work of Being Watched*, Critical Media Studies: Institutions, Politics, and Culture. (Lanham, Md. ; Oxford: Rowman & Littlefield, 2004), p. 118.

34 Ibid.

35 TiVo, accessed 23/10/2018, https://business.tivo.com/company/about-us

36 J. David Bolter and Richard A. Grusin, *Remediation : Understanding New Media*, First MIT press paperback edition. ed. (Cambridge, Mass. ; London: MIT Press, 2000), p. 225.

37 Ibid., p. 223.

38 Henry Jenkins, *Convergence Culture : Where Old and New Media Collide*, Updated with a new afterword. ed. (New York, N.Y. ; London: New York University Press, 2008),

39 Ibid., p. 13.

40 Ibid., p. 13-14.

41 Ibid., p. 2.

content on the internet and interact with the participants through webchat, alongside daily updates of the show in the form of text messages.[42] The programme was not meant to be viewed solely on television, it was designed to be consumed on other media devices, operating in a cross-platform environment. This hybridisation expands the possibilities for seeing more: however, the medium by which the information is distributed also alters the perception of the event. Thus, the information received by text messages seems to be mediated more than that gathered through the online cameras inside the house. The event is thus hyper-mediatised by an array of platforms that are constantly encouraging consumption of the show and the participation of its audience. The more transparent the event becomes to its viewers (i.e., the more visual access we are given), the more mediated it seems to become and thus more opaque the 'real' lives and conflicts of its inhabitants.

The televised version of *Big Brother* on prime-time can be identified as the official story of the programme — a sort of meta-narrative[43] — where edited images and an official voiceover narrate the event. However, this is challenged by other modes of access to the story, such as text messages, internet material, webchat communication, and so forth. Thus, in *Big Brother*, the highly-edited content of its televised version is complemented and contested by the unedited, poor quality images of the webcams placed in private spaces such as rooms and bathrooms that can be accessed through its internet format.[44] The audience therefore has access to the show through a collection of raw material that can be used to construct different narratives depending on their engagement with the show.

In *Nautilus*, it is difficult to separate the object from its performance on different media platforms, where its architecture operates in the field of images. The project was no longer a transparent glass house but a mediatised event, whose images where disseminated daily on television shows, news reports, and in newspapers. *Nautilus* and the media seem to be two different 'apparatuses' operating in constant feedback. Thus, while the media used the architecture and the actress' performance as media content, the object used the media as a prompt or support to reach larger audiences but also to overcome the poor optical conditions between the property wall and the house, which were corrected and recalibrated by the camera.[45] Through its media dissemination, the project constructed alternative and new modes of visuality that superseded its unmediated optical structure.

The media in return creates a form of fetishism in which television heightens and disseminates a sexualised version of the house**,** thus creating, augmenting, and increasing the desire to see it. The media interposes another 'screen' between the viewers and the project, what we see is therefore the woman screened under a veil of eroticism, sensuality, and, at times, pornographic content constructed mostly by the television images [fig. 4.9 and 4.10]. In effect, *Nautilus* becomes a hybrid, part-architecture, part-image; its domestic routines intertwined with forms of media content.

4.1.5. Intertextuality

Analysing the work of Mikhail Bakhtin, Julia Kristeva devised the term intertextuality as a form of production in which a literary work, the text, is formed by a series of relations to other literary *structures.*[46] Thus, a text is never by itself (*a point*)[47] but is constructed through its constant dialogue with other texts, as a weaving in and out of references. This dialogue moves between the writer, the addressee, and the cultural context. Kristeva describes a *horizontal* status between the writer and the reader, and a *vertical* status between the text and other texts. Intertextuality refers to the blurring of these structures, where author, reader, text and context form a series of cross-references that challenge the notion of intersubjectivity.

In media studies, intertextuality is referred to as a "cultural resource bank"[48] consulted by viewers and text, the importance of which relies on the possible enhancement taking place between texts. For the media scholar John Fiske, in television industry, the excessive circulation and production of primary texts (*horizontal* status) has produced within our culture a vast collection of advertisers, promoters, and critics (*vertical*) as secondary sources attached to

42 Bignell.

43 Stella Tincknell and Parvati Raghuram, "Big Brother, Reconfiguring the 'Active' Audice of Cultural Studies?," in *Understanding Reality Television*, ed. Su Holmes and Deborah Jermyn (London: Routledge, 2004).

44 Ibid.

45 Jorge Christie explained, for example, how the solid wall dividing the site from the street did not provide an easy view from the exterior. Even though some parts of the top wall were replaced by a galvanised wire mesh, permitting some direct vision, the house was always difficult to reach given the height of the wall and the amount of people struggling for a place. Moreover, when there were major gatherings, the preferable view was from the stairs in in the church across the street, increasing the distance between the house and the eye.

46 Julia Kristeva and Toril Moi, *The Kristeva Reader* (Oxford: Basil Blackwell, 1986)

47 Ibid., p. 36.

48 John Fiske, "Moments of Television: Neither the Text nor the Audience," in *Remote Control : Television, Audiences, and Cultural Power*, ed. Ellen Seiter, et al. (London: Routledge, 1989), p. 65.

4.9

4.10

4.9 — Daniela getting out of the shower. Archivo biblioteca Nacional. Chile.

4.10 — Nautilus' television images. snapshot taken from television sequence. canal 13. Chile.

the main body of work. These secondary texts interpellate[49] the primary text, assigning to it a specific meaning, and can be used by the producers to reach larger audiences or by the promoters to sell their products. Thus, an interview with a television figure, an article about his personal life, or the promotion on television or other advertising platforms, stimulates the primary text,[50] whether this is a television programme, a soap opera, or a reality show.

Intertextuality on television is not new, but its interplay is augmented in reality shows.[51] The programme is a constellation of events unfolding on different media platforms, all of which construct varying perspectives on its narrative and text. In the case of *Big Brother*, it is possible to identify not just the official narrative controlled by the producer, but alternative readings from unofficial sources.

These platforms belong to other sites independent of the show — newspapers, magazines, television shows, radio programmes — that create their own version and reading of the event. The content is appropriated by other institutions and its narrative is constantly redrawn by external influences. Its audience is mobile and informal, reading the story from official as well as unofficial sources. Therefore, in the case of *Big Brother*, participation to determine the unfolding of the story is contextualised and encouraged under a very flexible and miscellaneous structure. Nevertheless, there is always a "game frame,"[52] a field of action defined by the producers that serves to regulate the level of participation by the audience.

However, according to Fiske, it is also possible to identify another relationship operating in vertical intertextuality. This relationship is produced between the primary text and the tertiary text: it is activated by the same viewers who express themselves via the media (magazines, newspapers, television programmes) and through the informal medium of conversation,[53] creating their own versions and readings of the event.

In *Nautilus*, what was the architect's level of authorship when the images became dispersed on different media platforms, appropriating its content under different agendas and ideologies? Their authorship was challenged when the media and other groups began to claim their own interpretation of the event. Thus, there were those who supported the project while others stood against it. Some viewed it as an act of 'liberation' in a society intellectually and sexually repressed during years of dictatorship, others as a direct insult to the Catholic institution — represented by the nineteenth-century church in front of the project. There were also those who complained about the use of public funds. Somehow, the architects, as producers, were displaced from their object — the glass house. This was driven in part by their refusal to give any interviews during the first few days of the installation,[54] increasing speculation about its meaning and giving space to the media and the audience to create their own interpretations without an official reading.[55]

There was therefore a complex interweaving of discourses fused with interviews and the impressions of passers-by, politicians, academics, journalists, artist, critics, and so on, informing the media about the performance, which in turn was communicated to the televised audience and the newspaper reader, enacting McLuhan's dictum that: "the content of a medium is always another medium."[56] A form of fetishism thus emerged in which television created, augmented, and increased the desire to see the house. As Wolfgang Ernst observes: "Television cameras…not only want to document but even generate the event."[57]

Nautilus encouraged people to participate in the now televised event, occupying the only place available as voyeurs. The house created an act of collective voyeurism spread across the circulation of its images in the media. More importantly, it is not that *Nautilus*, as an architectural object, has been altered by the insertion of the media — as if architecture and more precisely its domestic interior had been 'contaminated' by them. Rather, *Nautilus*, in its performance as an art installation, is the consequence of an emergent process of media convergence. This is, a new domesticity emerges from the convergence of stablished and new cultural practices facilitated by the new technology. But while the house disseminates the interior as a new 'media content', one used for the promotion and confirmation of the self, this one also enters the process of feedback loop. Therefore, the media absorbs this content to produce their own modes of voyeurism and exhibitionism through institutionalised television networks.

49 Fiske refers to Louis Althusser's concept of interpellation, which is used in this instance as a way of engendering a receptive attitude in the audience towards the ideological function of the work.

50 Fiske.

51 Su Holmes, "'All You've Got to Worry About Is the Task, Having a Cup of Tea, and Doing a Bit of Sunbathing': Approaching Celebrity in Big Brother" in *Understanding Reality Television*, ed. Su Holmes and Deborah Jermyn (London: Routledge, 2004).

52 John Corner, "Performing the Real: Documentary Diversions (with Afterwords)," in *Reality Tv : Remaking Television Culture*, ed. Susan Murray and Laurie Ouellette (New York: New York University Press, 2009), p. 50.

53 John Fiske, *Television Culture* (London: London : Routledge, 1989).

54 Bonnemaison and Eisenbach.

55 Torres says that, as authors of the projects, they decided to become spectators disappearing among the voyeurs. At some point they even adopted the role of the media, interviewing people with a camera to elicit their opinions on the project. This was done before any official statement was given to the press.

56 Marshall McLuhan, *Understanding Media : The Extensions of Man*, ed. W. Terrence Gordon, Critical edition. ed. (Corte Madera, CA: Corte Madera, CA : Gingko Press, 2003), p. 13.

57 Wolfgang Ernst, "Beyond the Rhetoric of Panopticism: Surveillance as Cybernetics," in *Ctrl [Space]: Rhetorics of Surveillance from Bentham to Big Brother*, ed. Thomas Y Levin, Ursula Frohne, and Peter Weibel (ZKM Center for Art and Media Karlsruhe, Germany, 2002).

4.11

4.11 — Nautilus' television images. snapshot taken from television sequence. canal 13. Chile.

4.2. The Television Sequence

Adjusting a section of pink dress at the top of her thigh, followed by one of her shoulder straps, it is early in the morning as Tobar prepares to leave the glass house in which she has been living for the past few days. Her domestic routines have been followed daily by different television stations, which have been consistently using *Nautilus* as content for their own programme, exhibiting Tobar's performance inside the house.

Crouching to lock the front door of the house, she turns and approaches the street, moving towards the throng of voyeurs and the media, to leave the site. As shown in figure 4.11, her body is followed by the television camera as if the house has been inadvertently replaced by the television screen, blurring the boundaries of the installation, or rather elongating it outside the house. The glass surface has been removed and transformed into a series of picture planes multiplied across the site. These can be read as the physical expansion of *Nautilus* along the site, or as the ambiguity caused by the glass surface on the television screen. Moreover, making more explicit the uncertain boundaries of the house, figure 4.14 to 4.16 show the same television sequence with the camera lens fixed on the house. The entire sequence then develops as a series of floor plans — rather than picture planes — mobilising its interior and the objects contained within across the site.

What these drawings show is perhaps what the media archaeologist Erkki Huhtamo terms a *topos*; the recurrent use of a stereotypical motif as cultural expression. Borrowing the concept from the literary scholar Ernst Robert Curtius, the notion of *topos* (pl, *Topoi*) — from the Greek 'to place' — refers to the commonplace, the clichés, and the cultural conventions that continually emerge in the literary tradition. For Huhtamo, however, *topos* also operates in media history, where its main purpose lies in disguising media devices under an aura of innovative and novel technology while obscuring tradition and continuities. This might at first appear to imply that Huhtamo was interested not in identifying ruptures throughout media history, but in hidden continuities in a process that bears more resemblance to a genealogical practice rather than a Foucauldian archaeological exploration. However, Huhtamo contends that it is precisely through the identification of hidden continuities that it becomes possible to understand the reverse: what is strictly new.[1]

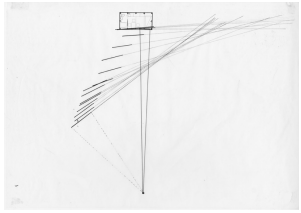
In this sense, Huhtamo recognised several different *topoi* used throughout media history. One of these is 'traversing the screen', which is the recurring idea of a screen being crossed by someone either inside or outside the apparatus; inserting the illusory world of representation into the objective world of reality or vice versa. He argued that:

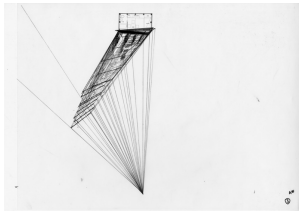
> No matter how 'revolutionary the product might be, advertisements show us, over and over again, humans or objects braking through the screen in either direction. The manifest features of such ads are of course constantly updated in accordance with fashions and stylistic trends, but underneath we detect an ancient topos associated with the history of illusionistic representation. Figures have been stepping in and out of paintings for millennia; they are still performing stunts on today's flat-panel plasma screens.[2]

1 Erkki Huhtamo, "Dismantling the Fairy Engine: Media Archaeology as Topos Study," in *Media Archaeology : Approaches, Applications, and Implications*, ed. Erkki Huhtamo and Jussi Parikka (Berkeley ; London: University of California Press, 2011), p. 41.

2 "Dismantling the Fairy Engine: Media Archaeology as Topos Study," in *Media Archaeology: Approaches, Applications, and Implications*, ed. Erkki Huhtamo and Jussi Parikka (2011), p. 41.

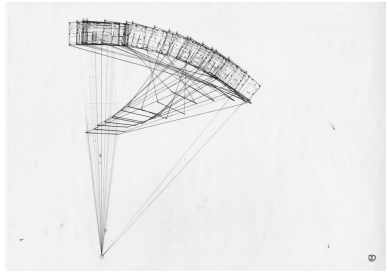
4.12



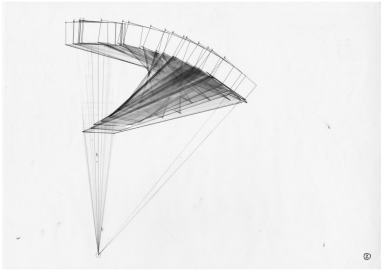


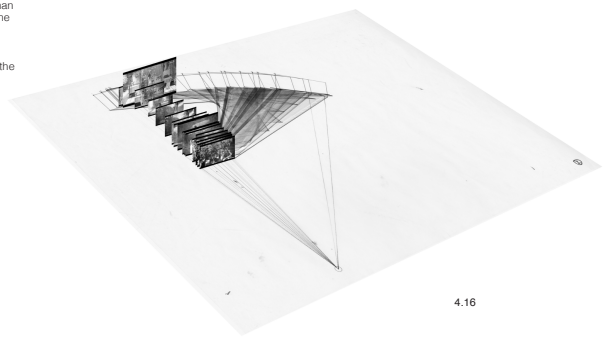
4.13

4.14



4.15





4.16

4.12 — Drawing showing the television camera following Tobar's body going out of the house. Her figure is represented as a series of picture planes moving across the site. Sebastian Aedo.

4.13 — Drawing showing the television camera following Tobar's body going out of the house. Her figure is represented as a series of picture planes that elongates from the house. Sebastian Aedo.

4.14 — Drawing showing the television camera following Tobar's body going out of the house. The entire sequence develops as a series of floor plans — rather than picture planes — mobilising its interior and the objects contained within across the site.

4.15 — The sequence elongates the picture plane in relation to the floor plan of the house.

4.16 — Other view for the same sequence.

All drawings produced by the author.

Because *Nautilus* operates as a screen that projects whatever it produces within its interior, every time the student actress leaves the house, she seems to represent a common marketing strategy in the world of screen technology. Architecture becomes transformed into a media *dispositif* that, according to Huhtamo, from a screenology point of view, "manifests itself materially but also discursively in the cultural imagination."[3]

In this sense, seen through the television sequence, Tobar's moment of departure from the house makes it appear as if her body — enclosed behind the glass screen — has finally been set free, not only from the domestic routines that sustain her presence but also from the world of representation to penetrate the objective world of reality. Thus, *Nautilus* becomes a sort of screen within a screen, an architectural re-mediation: the superimposition of one medium over the other. While the house acquires from the street a cinematic viewing condition[4], its image is simultaneously absorbed by the television sequence. This gives rise to the uncanny feeling of seeing not just the performance on the glass surface on television but also the viewers, voyeurs who happen to be trapped in the middle of both screens — the one that projects (the glass wall of the house) and the one that records and transmits (the television screen).

4.2.1. Remediating Nautilus

Nautilus operated in a cross-platform environment, moving between its performance as an art object, its representation on television and in newspapers, and its content on its own website, which was launched by the architects a few days after the project began.

However, the domestic interior was constructed as a medium that not only circulates through different media platforms, it is absorbed by them and is thus reformed, "incorporated or represented in another [medium]."[5] This is what Jay David Bolter and Richard Grusin term *remediation,* understood as the refashioning of one medium within another medium. For Bolter and Grusin, acts of remediation occur when a film is transmitted on television, or when we gain access to a photograph or a work of art through the computer screen. Remediation is not simply a vertical structure in which old media is refashioned within new media, it is also a structure in which older media engages with new media such as when, in the production of a film, new computer technology is used to create a scene or even throughout the entire process of postproduction. Perhaps more importantly, remediation refers not only to the absorption of one medium within the other but also the ways in which "it reforms reality itself,"[6] constructing equally valid forms of representation as an alternative form of reality.[7]

For Bolter and Grusin, it is through the concept of remediation that we can also understand the concept of 'medium', which they define as "that which remediates."[8] For these authors, a medium in today's media environment always operates in relation to other mediums, entering "into relationships of respect and rivalry."[9] They argue that a medium should be understood in terms of Latour's notion of the hybrid:[10] in this case, as a technological component integrated with specific 'content' within an economic and social framework.

From this perspective, *Nautilus* seems to remediate itself. Thus, while architects refer to the glass houses of modern architecture

3 "Screenology: Or, Media Archaeology of the Screen," in *The Screen Media Reader : Culture, Theory, Practice*, ed. Stephen Monteiro (New York: Bloomsbury Academic, 2017).

4 This cinematic condition is not restricted to other modes of viewing. At times the performance also functioned as a peeping box (looking at it from a hole or a crack on the wall), and the metallic mesh covering some fragments of the wall seemed to reproduce Alberti's velo, a device used to translate the three-dimensional space into its perspectival representation.

5 J. David Bolter and Richard A. Grusin, *Remediation : Understanding New Media*, First MIT press paperback edition. ed. (Cambridge, Mass. ; London: MIT Press, 2000). p. 45.

6 Ibid., pp, 61.

7 In this respect, Bolter and Grusin used the example of virtual reality, where this alternative form of conceiving the world reforms not just the appearance of the reality but reality itself, proposing a new kind of presence while conferring meaning to it, much as we do in the 'real' world.

8 Bolter and Grusin, p. 98.

9 Ibid. seem to come close to Friedrich Kittler who refers to media as a model of technical innovation that follows a logic of military escalation, in the sense that media only develop and answer in relation to each other. See Friedrich A. Kittler and Anthony Enns, *Optical Media : Berlin Lectures 1999* (Cambridge: Polity, 2009), p. 30.

10 Latour's concept of the hybrid refers to the notion that 'things' are not just concerned with culture or nature, but rather in the 'modern' world they combine and become hybrids. Thus, a hybrid refer to things or situations in which social and natural elements combine. See Bruno Latour, *We Have Never Been Modern* (Cambridge, Mass.: Harvard University Press, 1993).

as not sufficiently modern, these ones are remediated as an art installation, a performance transformed into an image consumed by passers-by. This image is simultaneously absorbed by the media and eventually 'refashioned' as a potential idea for a reality show.[11] It is through coupling with the media that domesticity follows its own process of remediation, where images are not only circulated across different platforms, but they are also absorbed by them.

4.2.2. Immediacy and Hypermediacy

As a medium, *Nautilus* was both an artefact — a transparent glass house — and a form of 'content', the image of eroticised domestic routines. The limits between the private and the public were blurred by the use of completely transparent glass, allowing the viewers, the television, and the photographic cameras unrestricted access to its interior. Through the lens of a camera, the glass surface oscillated between moments of appearance and disappearance, moments of reflection and transparency — which, in the case of the latter, dissolved the mediation between private and public.

In this sense, the disappearance of the glass, as the mediated surface split between the interior and the exterior, between the image and the viewer, can be seen as a transparent immediacy — one of the two forms of logic operating in remediation. Immediacy, according to Bolter and Grusin, is the constant attempt to make the medium disappear, to leave us only with its object represented, thus erasing any trace of mediation. Transparent immediacy is achieved by the desire to make the house — as medium conveying domestic routines — disappear,[12] its walls through the camera lens fade. Thus, accomplishing an immediate visual contact with the "thing represented,"[13] this means, its interior and the female figure. [fig. 4.17]

Immediacy and hypermediacy are the "mutually dependant"[14] logics operating in remediation. While the former point towards the direct disappearance of the medium by which we, the spectators, gain access to the representation; the latter paradoxically achieves a sense of immediacy through the multiplication of "processes and performances."[15] This is most evident in the configuration of the pages on the World Wide Web, where the window-like interface delivers a series of multiple and simultaneous points of access to information. In this regard, Bolter and Grusin state that:

> where immediacy suggests a unified visual space, contemporary hypermediacy offers a heterogeneous space, in which representation is concessive not as a window on to the world but rather as 'windowed' itself — with windows that open on to other representations or other media.[16]

In *Nautilus*, we can identify both logics or remediation — immediacy and hypermediacy —operating through the television images. While the former was achieved by the fading of the glass surface and the collapsing of distance between the street and the house; the latter operated through the graphical interface dividing the image into two or more frames that informed or (de) contextualised the event. However, hypermediacy is also described as the counterpart of transparency[17], as that which makes visible or evident an act of representation, or as the "hyperconscious recognition or acknowledgment of the medium."[18] Thus, in *Nautilus*, hypermediacy can be found through the constant multiplication and reiteration of images of the house and through the continuous adjustment of these, interplaying between the image of the exhibitionist and the voyeurs [fig. 4. 18].

In *Nautilus*, the immediacy caused by the penetration of the camera inside the house was constantly challenged by the same television images exposing the voyeurs and the media recording the event. However, more evident was the mediation of the glass surface, at times transparent and at others reflective; at times delivering immediacy and at others hypermediacy. This also affected the viewing condition of *Nautilus*, which delaminated into different surfaces, some looking at the object of desire and others looking at themselves as if in a mirror image.

4.2.3. Immediacy as a Viewing Condition.

In a remediated environment, immediacy can be read as the desire for an unmediated encounter, for a unity with the real object represented. Thus, immediacy seems to be highly ideological in

11 Arturo Torres and Jorge Christy registered the copyright of the project. In this context, a few years after *Nautilus* came to an end, they were contacted by a Brazilian television producer who intended to adapt the project into a reality show. According to Torres, he and Jorge refused to sell the rights.

12 There is also this explicit desire to make the distance between the house and the street disappear.

13 Bolter and Grusin, p. 6.

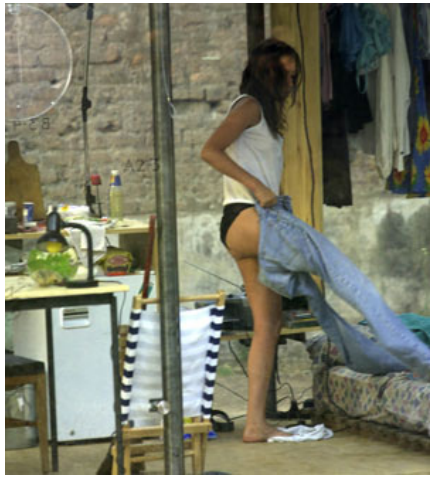
14 Ibid.

15 Ibid., p. 31.

16 Ibid., p. 37.

17 Ibid., p. 37.

18 Ibid., p. 38.



4.17

4.18

4.17 —Tobar getting dressed. The glass surface seems to disappear, granting un-mediated access to her figure. Photographic Archive El Mercurio.

4.18 —The surface of the glass appears through its reflection. Voyeurs and exhibitionist collapse in a single surface.

the sense that we are granted access to reality only through its representation — concealed from the 'real' object. In this sense, we can see some parallels between the operation of immediacy and the Lacanian concept of the screen, as that which allows us to see reality only through the representation of it. The Lacanian screen is described by Lacan as that "which cuts into that which is illuminated without being seen"[19] — denying the presence of mediation while allowing the representation of the object. However, what the Lacanian screen conceals is the gaze, *objet a*, which is never directly seen but is veiled under the presence of other "elements of the imaginary order"[20] — a metonymic process. Thus, we never see the real 'thing', we see instead its semblance,[21] and we never acknowledge this representation as a veil or as a mask. This operation seems to work under the same logic of immediacy, which denies any notion of mediation, making us believe that we have a direct access to reality. Consequently, in *Nautilus*, just as *object a* (as the object of desire) is concealed behind the body-parts displayed on the television apparatus, the surface of the glass and its distance from the street are veiled by the same apparatus. Thus, television not only operates as an electronic device that reforms or construct alternative forms of reality; in so doing, it also multiplies, intensifies, and proposes new symbolic dimensions — for example, the body surface detached from its context, split at times into pornographic images, and body parts.

4.2.4. Hypermediacy as the Scopic Drive's Reshuffle

In relation to hypermediacy — at least in the televised sequences of *Nautilus* — it can be said that an awareness of both the medium and our position as viewers is present. This situation has a special consequence for the voyeur because, in voyeurism and exhibitionism, the subject's scopic drives undergo a reshuffle that can be compared with the process of hypermediacy.

As part of the scopic drive, the gaze is situated within the structure of a topological journey that moves outwards and backwards[22] between two opposites poles described by Freud as: to see and being seen (in relation to the scopophilic and exhibitionistic instincts) or to torment and be tormented (sadism and masochism). In this sense, the scopic drive defines the operation of a structure, which occurs prior to any process of subjectification (i.e. in the case of perversion, this is not within the drive but rather emerges in the way in which the subject is placed within it).[23] For Lacan, each drive operates under its *aim,* whose purpose (its *goal*), is not the accomplishment of its object of desire (*object a*, which can never be reached) but rather its itinerary, its journey. Thus, the pleasure of the drive comes from its complete journey, from its loop around *object a* — which in the scopic drive is the gaze — rather than from its encounter.

Lacan stressed that the drive is structured under three grammatical voices: active, reflective, and passive, which can be translated as 'to see', 'to see oneself', and 'to be seen'. What the subject looks at is a shadow, an absence, or, as Lacan says: "What one looks at it is what cannot be seen,"[24] it is precisely the presence of an absence (*object a*) that motivates the interminable search for the accomplishment of the desire. However, in the case of the perversion, as in voyeurism, "the target is reached"[25] by the introduction of the Other. This Other must be understood as the one who maintains in suspension the voyeur as gaze. Thus, in voyeurism, the voyeur falls into the victim's own gaze, and it is precisely when he is discovered in the very act of looking that he experiences "a conflagration of shame."[26] The voyeur becomes the object of the Other's *Jouissance* (the one who is seen), and thus he is not a subject anymore, but becomes part of the Other's drive.

In perversion, there is a montage, a reshuffling of the voyeur's drives into the drive of the Other. Thus, the voyeur finds in the presence of the one he is looking at his own splitting being, and thus the circuit of the drive is finally completed. Therefore, there is always an exhibitionist within a voyeur, and always a voyeur within an exhibitionist. From this perspective, the reflection of the voyeurs upon the glass surface of the house, or the constant oscillation of television images between voyeurs and exhibitionist, can be seen as the visual representation of them crossing over, of the materialisation of the short circuit of drives between the viewer and the viewed.

19 Jacques Lacan and Jacques-Alain Miller, *The Four Fundamental Concepts of Psycho-Analysis*, The International Psycho-Analytical Library (London: Hogarth Press : Institute of Psycho-analysis, 1977), p. 108.

20 Stephanie S. Swales, *Perversion : A Lacanian Psychoanalytic Approach to the Subject* (New York, London : Routledge, 2012), p. 114.

21 Ellie Ragland, *Jacques Lacan and the Logic of Structure: Topology and Language in Psychoanalysis* (Routledge, 2015), p. 125.

22 Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, The International Psycho-Analytical Library (London: Hogarth Press, 1977).

23 Ibid., p. 182.

24 Ibid.

25 Ibid.

26 Ibid.

4.2.5. Intermediality

To follow *Nautilus* own process of remediation, the following installation *Remediating Nautilus* — designed as part of this research by design — consists of the appropriation and continuous circulation of its content on different media platforms. Moreover, *Nautilus* as an art installation is not just an isolated matrix producing media content, it is also part of a media convergence. Thus, it can be understood as an alternative platform where different media practices converge. Viewing *Nautilus* through this lens means that the visual culture of exhibitionism and voyeurism finds also in architecture — and more precisely in the domestic space — a medium through which to fulfil its desires. Thus, architecture becomes part of the media feedback loop, where exhibitionistic practices, stimulated by but not restricted to conventional media, are absorbed and re-enacted by architecture, which in turn produces a renovated media content (which is again absorbed by the media).

In this regard, the installation *Remediating Nautilus* appropriates the media content built by different television channels. Through a series of fragments of news reports and television programmes, the installation reconstructs an alternative and different reading of the project. Retrieving its cinematic condition, *Remediating Nautilus* combines the medium of film and television. The former incorporating one of the final scenes from Win Wenders' film *Paris, Texas* (1984) and the latter using *Nautilus*' television images gathered from the internet. Therefore, in its remediation, film and television combine and transpose each other into a new viewing object.

Projected onto a wall, *Paris, Texas* acts as a new surface of inscription applied to *Nautilus's* television images. The film narrates the difficulties of the disturbed Travis Henderson, who after four years wandering in the desert, must reunite with his eight-year-old son Hunter and his wife Jane. *Paris, Texas* tells a story of re-encounter and reconciliation where, after his absence, Travis decided to recover his son's trust and reconcile with his wife, who abandoned his son shortly after Travis' disappearance.

The scene that was selected depicts an encounter between Travis and Jane, who works in a peep show attraction at a strip club. The scene depicts Travis and Jane in a complex visual composition organised in the form of a two-way mirror room [fig. 4.19]. Concealed behind the mirror, Travis is in full view of his wife Jane, who — on the other side of the room — can only see her reflection on the surface of the mirror. Refusing the visual control granted by the room, Travis turns his back to the 'window' to narrate an apparently fictitious story through the phone device that allows communication between the two spaces.

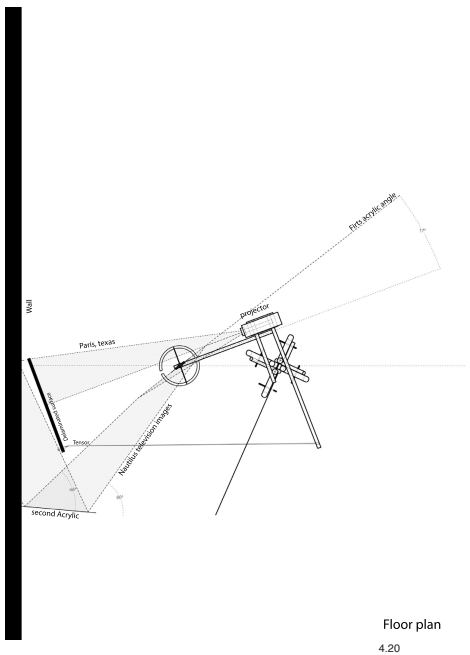
Throughout the dialogue, the camera intermittently positions itself on either side of the mirror. The scene appears to reinforce Laura Mulvey's concept of the male gaze, which this time is not facilitated by the male character but by the position of the camera. No matter where this is placed, what is always shown is the female actress as an object of desire, framed either by the camera, the mirror, or the 'window'. This creates a fascinating disjunction where the camera is not showing us what the male character sees, instead it becomes the view of a third character: the omnipresent eye of the spectator oscillating between one and the other side of the room, between reflection and transparency.

Using Final Cut Pro as Video editing software, *Remediating Nautilus*, constructs a new projection out of the combination of the film scene and the television images. Thus, the right side of this new scene corresponding to *Paris, Texas* is projected onto a surface that has been cut and delaminated from its wall. As if opening a window from one of its corners, a string pulls out this new surface constructing a threshold, a slit between the wall and the pulled side, uncovering a new plane behind the wall. *Paris, Texas* is projected as if its two-way mirror is slightly leaning forward, encouraging those with desires to peek at the other side [fig. 4.20].

However, through a series of transparent acrylic surfaces diverging the cone of projection, what is found on the other side of *Paris, Texas* image is *Nautilus*' television images, as if concealed behind the wall, or rather behind the cinema's dispositif. To see images of *Nautilus*, we must deliberately acquire a voyeuristic disposition, finding the perfect angle and distance in relation to the image. More importantly, we must do so as if we wanted to view not only the other side of the wall but the other side of the two-way mirror scene projected onto it [fig. 4.21].

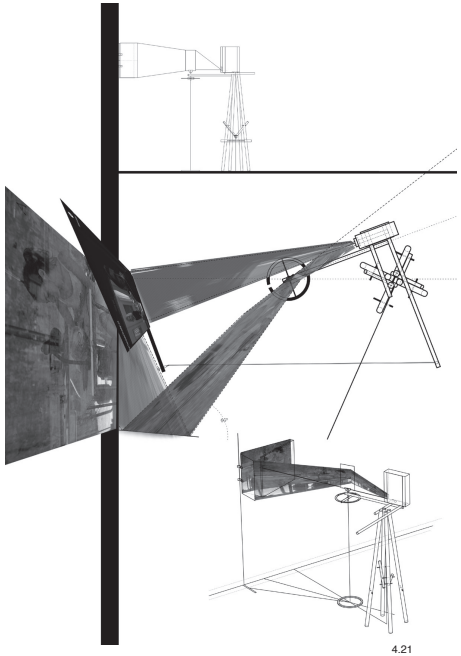
Remediating Nautilus operates in an intermedia environment, whereby the installation (its images and its material consequences) is formed by the incorporation of two different types of media: television and film; each responding to a particular surface and viewing condition. Consequently, voyeuristic and exhibitionist

4.19



Floor plan

4.20



4.21

4.19 — Image from the film *Paris,Texas.* (1984). Director: Win Wenders'

4.20 — The wall of the gallery is delaminated. *Paris, Texas'* scene projected as if its two-way mirror is slightly leaning forward, encouraging those with desires to peek at the other side. Sebastian Aedo.

4.21 — Through a series of transparent acrylic surfaces that diverges the cone of projection, what is found on the other side of *Paris, Texas*' scene is Nautilus' television images, as if concealed behind the wall, or rather behind the cinema's dispositif. To see images of Nautilus, we must deliberately acquire a voyeuristic disposition, finding the perfect angle and distance in relation to the image. More importantly, we must do so as if we wanted to view not only the other side of the wall but the other side of the two-way mirror scene projected onto it. Sebastian Aedo.

dispositions take place not just in the virtual image (the ones projected onto the surface) but in the spatial threshold between these two media representations, in an 'intermedial' environment.

The term *Intermediality* derives from the work of the artist Dick Higgins, who in 1965 introduced the expression into the field of art theory. For Higgins, intermedia refers to the quality of an artwork that operates, or *comes into being*, through the interstices of two or more different types of media.[27] For the literary scholar, Irina Rajawesky, intermediality is a fundamental condition of intertextuality that she describes as: "those configurations which have to do with a crossing of borders between media."[28] In this sense, Bolter and Grusin's concept of *remediation* can be understood as an intermedial practice. However, for Rajawesky, the application of the term *remediation* is too broad as it overlooks significant differences between one mode of remediation and another (i.e. a film that, as a medium, incorporates digital technology; and a painting that — taking photography as a reference — attempts to produce by its own means a 'realistic' image). Thus, Rajawesky adopts a much narrower sense of the concept and proposes three subcategories: media transposition, media combination, and media reference.

Rajawesky' categories are useful in elucidating how intermediality — in a broad sense — can be divided into more detailed categories, thus recognising more precise forms of remediation. In *Remediating Nautilus* it is therefore possible to acknowledge different modes in which the project — in its media representation — is appropriated, repurposed, and refashioned[29] into a new media configuration (or through the transposition, combination, and reference to other media). Thus, in *Remediating Nautilus*, it is possible to see how different modes of media representation provides different types of viewing conditions.

Following Rajawesky' categorisation, in the case of media transposition, this one can be identified in the process of overlapping one medium onto the other. Therefore, in *Remediating Nautilus,* it is possible to recognise a media transposition when television images — gathered from the internet — are manipulated using Final Cut Pro software. The purpose of this software is to slow down the speed of the television images to match the dialogue of the two-way mirror scene from *Paris, Texas* thus transposing the narrative of the film onto images of *Nautilus*.

This transposition of an audible text into a visual one extends its intertextual process. What informs and contextualises the performance of the actress is not the official framework, as a form of meta-narrative given by its architects, the editorial policy of the news reports, or the more informal impressions of the passers-by, but Travis' 'confessional' statement regarding his behaviour as husband and father. Hence, at the installation, Tobar's domestic routines unfold under the context of a 'confessionary' performance that describes the intricacies of love, jealously, and parenting, as well as domestic violence and alcoholism.

As a viewing condition, *Nautilus* is no longer seen on the surface of the television screen but behind the material surface of a wall that has been delaminated, creating a narrow threshold through which to peek. Thus, we can see how the viewing condition originally defined in situ by *Nautilus* — the constant adjustment of the body to see the other side of the wall — defines (or informs) the viewing condition of its media representation in the gallery.

In *Remediating Nautilus,* it is also possible to talk about a media combination as defined by Rajawesky. This acknowledges the 'medial constellation' composing a given media. In this category, Rajawesky recognises how two or more media representations are present "in their own materiality."[30] In the installation, filmic and television images coexist in the media representation. Thus, the film sequence can be seen alongside with the television images — even though this is heavily manipulated by the computer software. A media combination is perhaps more noticeable in the way in which the installation 'combines' different modes of viewing, On the one hand, we have the furtive look, peeping at *Nautilus* images behind the surface of the wall, while on the other we have the direct look activated by *Paris, Texas*, which reproduces the look afforded within the cinema, placing the moving image in front of the viewer. Thus, in the same exhibition we recognise these two types of looking, corresponding to two different types of media manifestation.

However, it is perhaps a media reference where there is a consistent attitude of the medium to refer explicitly to another medium, as when a film refers to a painting, or a painting to photography. In this sense, we can see in *Nautilus* — as the glass house exposed towards the street — a coherent reference to the medium of film. This is also a logic of remediation, whereby an old medium can gain

27 Klaus Bruhn Jensen, "Intermediality," *International Encyclopedia of Communication, ed. Wolfgang Donsbach, http://www.communicationencyclopedia.com* (2008).

28 Irina Rajewsky, "Intermediality, Intertextuality, and Remediation: A Literary Perspective on Intermediality," *Intermédialités: histoire et théorie des arts, des lettres et des techniques/Intermediality: History and Theory of the Arts, Literature and Technologies*, no. 6 (2005): p. 46.

29 Nassim Winnie Balestrini and Ina Bergmann, *Intermediality, Life Writing, and American Studies : Interdisciplinary Perspectives*, Buchreihe Der Anglia Volume 61 (Berlin: De Gruyter, 2018), p. 100.

30 Rajewsky, p. 52.

possession of a new medium, in this case architecture appropriating the cinematic condition of the film screen as a viewing condition. However, in *Remediating Nautilus*, a reference to painting can be identified in the way the media installation is represented. The surface of the wall has been delaminated as if a 'window' has been half opened and what we see through this window differs from what we see through the narrow opening. The surface of the wall evokes Rene Magritte's painting *La lunette d'approches* (1961), used by the Slovenian philosopher Slavoj Žižek as a representation of the Lacanian real penetrating into the symbolic. The painting depicts a landscape seen through the glass pane of a narrowly opened window; however, what we see through this gap is not the landscape but a black stain. Žižek states that: "The frame of the windowpane is the fantasy-frame which constitutes reality, whereas through the crack we get an insight into the 'impossible' Real, the Thing-in-itself."[31] In the installation, the gap opened by this 'window' is supplied by *Nautilus*' television images, as the underside of the cinematic representation. *Remediating Nautilus,* is a physical and virtual manifestation of a series of surfaces. There we find the film displaying the constant oscillation between the two-way mirror surface and the window, between the surface of the wall and the surface of what lies behind it, between the transparent manifestation of the acrylic surface and its reflective condition, each one of them articulating a particular viewing condition, and proposing a new reading of *Nautilus* following its own process of remediation.

31 Slavoj Žižek, *Tarrying with the Negative Kant, Hegel, and the Critique of Ideology* (DurhamDurham, N.C.: Durham : Duke University Press, 1993), p. 103.

V

5. Conclusion.

'Screening Domesticity' is a close reading of four exemplary case studies of twentieth-century domestic architecture: Adolf Loos' Villa Müller (Prague, 1930); Pierre Chareau's Maison de Verre (Paris, 1932), Charles and Ray Eames' Case Study House #8 (California, 1949), and Arturo Torres and Jorge Christie's project, 'Nautilus' (Santiago, 2000). This thesis re-evaluates the domestic interior, not as an unmediated built object, but as a highly-mediated visual representation. The study departs from a close analysis of the medium by which the domestic space has been represented in text, photography, film and television.

Drawing upon Walter Benjamin's account of the interior, as the surface-like mechanism enfolding and sustaining the subject in his 'illusions'[1], this thesis considers the emergence of the domestic space under a certain 'screenness' condition. Following Benjamin and others, such as the Italian philosopher, Massimo Cacciari, it argues that under an unbearable modern condition — understood here as the rationalisation of all social relationships driven by the new modes of capitalist production[2] — the interior emerges as a 'screen', which removes, but also shields the subject from this new metropolitan experience. However, the increased use of and media penetration into the domestic interior in the second half of the twentieth century inevitably calls for a reconsideration of its screenness condition. Considering the domestic interior and the architecture that sustains it as a technology of that screen, it would be pertinent to ask: What happens when the concealing-like aspect of this surface is interrogated by the penetration of new modes of visual representations? Moreover, with the emergence and massification of new media technologies, the domestic interior is not only penetrated by the media, but also appears to be absorbed and incorporated by it.

Different scholars have already explored the multiple synergies between domestic architecture and the media. Furthermore, one of the most significant works informing this thesis is the one undertaken by the architectural theorist, Beatriz Colomina, which is used as a constant point of reference and departure for this research.

1 Walter Benjamin and Rolf Tiedemann, *The Arcades Project* (Cambridge, Mass: Belknap Press of Harvard University Press, 2002).

2 Massimo Cacciari, *Architecture and Nihilism : On the Philosophy of Modern Architecture*, Theoretical Perspectives in Architectural History and Criticism (New Haven ; London: Yale University Press, 1993), text.

In her book, *Privacy and Publicity: Architecture as Mass Media*, Colomina challenges the dominant discourse that places modern architecture, and more precisely the domestic interior, as the consequence of a series of technical and material advancement in construction. Her work convincingly proposes that modernity in architecture, did not essentially concern the use of different materials and techniques, but rather its engagement with the media (i.e. photography, film, publication, exhibitions and so on). Therefore, through an exhaustive reading of the media archive (mostly through the photographic records of their interiors), she revisits the domestic architecture of two contemporaries, but seemingly opposed architects from the early twentieth century, Adolf Loos and Le Corbusier, by revealing the modes by which their work was consistently intersected and informed by media practices.

However, although her work regularly emerges as a reference throughout this thesis, it differs significantly in its approaches and intentions. The four different case studies presented here expand throughout the entire twentieth century, concluding in Arturo Torres and Jorge Christie's performative project, Nautilus, in the year 2000. The assumption here, is that in analysing the configuration of the domestic interior beyond the 1930s, inevitably suggests another form of engagement with new and different modes of media representation and practices. The media informing the work of Colomina (mostly photography) has been replaced by the dominant and more persuasive technologies of social media. Today, more than ever before, surveillance practices have been explicitly conducted through new technological devices and media platforms where the limits between the public and the private appear to be more blurred.

The importance of this study lies in the hypothesis that the irruption of new technological media presupposes the distortion of an interior that is no longer able to secure a separation between an outside and an inside, but also (recalling Walter Benjamin) sustains a particular mode of subjectivity. Therefore, the work presented is not only concerned with how architecture has come to engage with particular types of media practices, but also with its subjective and material consequences. The importance of this last point lies in that such concern instigates an alternative mode of enquiry that is intended to be tackled in this work via a 'creative practice' methodology. This research rigorously speculates on the varied subjectivities produced by the media conditions of the domestic interior. These conditions are understood as the ways in which the interior is capable of absorbing and incorporating different screen practices in the articulation and representation of the space; these subsequently advertised, promoted and disseminated by the same media. This creates a form of closed circuit, which I call a 'feedback loop' between media, domesticity and visuality.

For example, the Raumplan at Villa Müller articulates the interior through a series of framing situations, which is proper to photography. This particular way of organising the interior also indicates (or assigns) subjective conditions based on a relationship between viewer/image and subject/object. This situation is exploited by numerous publications depicting the interior, which places the photographic camera as a mechanical eye looking at a space that appears to be removed from the place from which it is observed. In this sense, Maison de Verre differs in that the interior is not organised as a framing device, but as a screening mechanism. In Maison de Verre, it is possible to recognise the large translucent façade as the main screen, filtering the light and constantly returning the look to the interior. However, it is the different mechanical elements inside the house that are constantly regulating the relationships between the viewer and the viewed. The programmatic distribution of the space, split between the clinic area and domestic interior, appears to be overridden by the different screens that open/close, slides and spin, thereby extending vision beyond any previous spatial organisation.

Despite their apparent differences, both houses, Maison de Verre and Villa Müller, operate as optical mechanisms distributing and organising an inner look that defines different subjectivities according to their position in space. Throughout my own design work, photography seems to verify, if not to emphasise this condition — arresting and framing a perspectival configuration of the space. Therefore, the design process, which extends towards the four different case studies, operates in two ways. On the one hand, it recognises and traces through a process of mapping, the media representation of the interior in the floor plan of the houses. On the other, it is in that very process of translation, that new possibilities of relationships begin to emerge. Furthermore, at this stage, other systems of representation, such as physical models and digital tools (Rhinoceros), are used to construct new viewing conditions that speculate on new modes of subjectification. Hence, the design procedure is not only concerned with a search for the 'hidden' visualities of the house organising the domestic space, but also with a productive re-enactment of them.

The process of mapping

Other similar studies, particularly research by design work, have explored the relationships between domesticity and visuality in specific ways. These include the work undertaken by architectural historian, Emma Cheatle, in her analysis of the Maison de Verre in dialogue with Marcel Duchamp's work, *The Large Glass*. In her monography *Part-Architecture: The Maison de Verre, Duchamp, Domesticity and Desire in 1930s Paris*, Cheatle challenges the conventional discourse of the house through a feminist reading of it. Her work critically combines history and design through a series of analytical plan drawings which seek to expand the research on domestic interaction, sexuality and female inhabitation[3]. Her drawings respond to a previous process of fictional narrative where the routes and actions of possible inhabitants and visitors to the house are visually traced and mapped onto its floor plan. It is through the process of mapping that the action of different materials begins to interact and mediate the intersubjective relationships inside both the domestic interior and the clinic zone. Cheatle's mapping process provides a useful tool and source of information for this study. However, while her mapping focuses on the experiences and flow that the building suggests[4], my own mapping process concerns vantage points and the perspectival articulations that the interior offers. Nevertheless, while this perspectival edifice informs an initial process of mapping, subsequent drawings challenge the philosophical foundation of its construction, which places the viewer as an illusory self-reflecting subject as the master of the visual experience.

In this sense, it is important to mention how other 'by-design' works have explored and challenged the dominant discourses that sustain perspective as a faithful representation of the space and the lived experience. In her book, *The Architectures of Chance,* Yeoryia Manolopoulou engages with psychoanalytic theory to explore lived experiences as a process constantly informed by the subjective formation mechanism. In the first part of her book, *Portfolio 1: Chance in Perception*, 'chance' refers to the unpredictable and unrestrained interference of the Lacanian 'gaze' in the field of vision, destabilising the conscious and self-reflective experience of the space. Manolopoulou's work explores an alternative understanding of architecture as a mechanism of chance perception. Significant in her exploration are the various drawings produced as a mode of testing the constant tensions that have arisen between the subject, image and object. Working with the short film written by Samuel Beckett, *Film* (1965), the drawings function as a mapping that challenges perspectival representation as the masked presence of the Lacanian gaze, informing the representation of reality and the constitution of the self.

The design work in this thesis is constantly guided by the drawings through the mapping process, questioning the apparent unmediated representation proposed by the media. The floor plan of the different case studies (in the case of Nautilus, to a lesser extent) becomes a type of field survey, spatially tracing the images and visual descriptions in which the interior has been disseminated and presented in the media. For example, in Pierre Chareau's Maison de Verre, and Adolf Loos' Villa Müller, photographic records, as well as written descriptions, are used to trace the ways in which the domestic interior is able to assign different subjectivities according to the articulation of an inner look. The relationships between a viewer and a photograph, or a reader and a spatial narrative, are drawn as expanded visual fields, firstly shaped by the floor plan of the houses, and subsequently by its three-dimensional space. In Charles and Ray Eames Case Study #8, the research departs from a close analysis of their film, *House: After Five Years of Living,* where the various photographic slides are traced and redrawn inside the floor plan of the house. In this situation, the mapping performs as a form of 'spatialisation' of the film, where their sequential unfolding on the screen becomes spatiality situated on the floor plan of the house. In this case, the mapping process is not concerned with a narrative between inhabitants of or potential visitors to the house, but with a narrative regarding the constant displacement of the photographic camera throughout the film.

Similarly, in Arturo Torres and Jorge Christie's project, Nautilus, the image of a television sequence is separated into snapshots that are relocated as picture planes across the site. Therefore, the different media representations (photography, film or television images) fold back into architecture to the space of the house through their re-enactment as drawing following the conventions of architectural representation. Throughout the process of continual permutation, the drawings (the practice of mapping) transform the media conditions of the interior into new and alternative forms of material manifestation, proposing new types of subjectification. The very practice of mapping informs and drives the research towards new speculations and design processes, testing alternative viewing conditions, modes of subjectification and material outcomes.

3 Emma Cheatle, *Part-Architecture : The Maison De Verre, Duchamp, Domesticity and Desire in 1930s Paris* (New York: Routledge, 2016).

4 Ibid.

Media archaeology

These mapping processes and sequence of drawings are guided under the theoretical frame of media archaeology. Although aware of the different interests and methodologies within the field, I believe it is still possible to find some points of convergence between the different approaches. Media archaeology dissolves the classification of media, it recuperates media inside one another as if wrapped technologies. When viewed from a more socially and culturally oriented approach[5], media archaeology disarticulates the media manifestation into different discourses and practices, expanding its material manifestation towards other modes of performativity.

Media archaeology allows me to dissolve the different categorisations by which the four cases studies are represented (written descriptions, photography, film and television) through creative practice. Therefore, while an initial mapping process transforms the images into drawings deployed onto the floor plan of the domestic interior, this process simultaneously proposes new optical relationships that were previously ignored. Hence, the use of drawing in my research acts as a translation instrument in which the specificity of the medium studied is suspended, unpacked and deconstructed. This process does not anticipate a desirable outcome, but new information and possibilities of production begin to emerge in the very process of mapping.

In this sense, in exploring the complex relationship between domesticity, media and visuality, the use of the word 'screen' becomes a productive model to investigate the different case studies. Following the work of the Finnish media scholar, Erkki Huhtamo, I consider the screen to be not only a material and technological artefact, but also a *dispositif*, a material embedded in discourses and cultural practices. Therefore, the word 'screen' transcends its condition as a material object to become a practice. 'Screening Domesticity' is the outcome of a rigorous design process where research implies a permanent practice of making, revealing, exposing and displaying the work produced, as if it is a screen. It is through the production of drawings, physical models, installations, and multimedia presentations that new speculations are tested and displayed.

For example, in the third chapter concerning the work of Charles and Ray Eames, their film, *House: After Five Years of Living*, works as the public display of their interior, a visual and audible performance that is highly mediated by both the technique used in the film and the preoccupation and discourses that frame it. Through the drawings, the thesis questions the apparently unmediated construction of the interior. The design work finds in the film's perspectival redundancy, rhythmical disclosure, fast-cut techniques, dissolves, peculiarities of framing, and film technique (produced from still photographs), the symptoms of a series of ideological discourses masked or screened behind a captivating visual experience.

In this case, the Eameses' film is deconstructed discursively and materially. Therefore, the initial process of mapping images of the interior is redrawn and placed as a picture plane in the floor plan of the house; and subsequently, within the three-dimensional model of it. This procedure entails a type of spatialisation of the film, an attempt to take photography back to the space of its referent. In so doing, the sequence of images is traced, and thus, the un-shown spaces of the house are revealed while acknowledging the visual redundancy of others. In the exhibition at the Tent Gallery at the Edinburgh College of Art, the images of the film were spatialised, the house deconstructed and fragmented, showing its inherent imaginary representation on the film screen. However, the purpose was not to seek the fragmentation *per se*, but to look at it in relation to the camera lens which moves through peculiar angles and framings. The fragmented configuration of the interior in the film is approached again as a perspectival analysis, which finally becomes a spatial performance of the image inside the gallery space. This spatialisation of the image not only deconstructs and rearranges the still slides of the film, but also proposes a new viewing condition, a new type of *dispositif* in which each interior image is pierced by the perspectival construction produced by the camera. The translucent protruding cones, which are suspended out of the surface of representation, can be seen as the phantasmatic presence of the camera and the eye. Therefore, the film is deconstructed materially, optically and discursively in order to reconstruct and propose a new performance of its interior.

It is important, in this case, to emphasise the critical reflection on the screen that media archaeology proposes. This is found in the contribution made by Huhtamo and his 'screenology' study which seek to blur the distinction between different manifestations of screen technologies. Screenology brings to this study, not only the dissolution of conventional categorisations of the screen, but also the construction of new relationships that were previously ignored.

In this sense, although the different case studies in this thesis correspond to different moments in the history of media representation, such categorisations are dissolved through the design component of the thesis. Furthermore, the importance of a media archaeological approach to the screen is its intermedial relationship with other cultural forms. Thus, in Nautilus, it is possible to trace the discourses and media practices which encourage the performance. Among this, we can find web-camming, the production of reality shows and increased desires for the exhibitionism and voyeurism stimulated by the media. The project intersects architecture with other screen practices, which seems to be obscure behind the sensuality of the transparent surface. Consequently, each medium becomes an assemblage of discourses shaping and modelling our visual experience.

Research by creative practice operates here as a media archaeological examination, tracing through its design component, the varied manifestations of the screen for each of the different case studies. Hence, the topology of the screen is never fixed, but rather wanders through multiple disciplines and systems of representations. We can find it as a material technology, an architectural element, a viewing condition, a film technique, as the mechanism of subjective formation and as a methodology of design — tracing, proposing and constructing its own viewing conditions and subjectification processes.

Media archaeology and psychoanalysis: The dialogue of the screen

In examining the different processes of subjectification by a viewing condition, this thesis proposes an interesting dialogue between the discipline of media archaeology and psychoanalytic theory. More precisely, it is through the theory of the 'gaze' and the 'screen', developed by the French psychoanalyst Jacques Lacan, that psychoanalytic theory appears to expand the idea of a *dispositif* beyond its historically specified account, discourses and material manifestations, towards an ahistorical model which mediates perception and representation.

Although it is not my intention to repeat the ways in which the complex mechanism of the gaze and the screen operates, which is carefully developed throughout the analysis of the different case studies, I would like to revisit this relationship briefly. The gaze can be described as the manifestation of the Lacanian Real which is an empty void of nothingness, the true subject qua-subject constituted in his/her own lack. A subjectification process is precisely a persistent attempt to compensate this lack through an object of desire (which Lacan calls object petit a). Images are particularly important in this context because they can be used as compensatory objects of our own lack, they represent our own gaze in a state of mediation, the gaze in the form of a screen.

Therefore, the gaze is assumed to be the consistent attempt of the Real (the unmediated contact with reality) to interfere in our symbolic register. The gaze operates as an ideological edifice that is only accessible through its representation through the mediation of the Lacanian screen. Although for Lacan, the gaze and the screen refer to a transhistorical model of vision, it is still possible to emphasise that its 'discovery' is historically situated, and its respond to the increased development of the new technical media available at that time. When Lacan montage the relationship between the gaze and the subject's visual field upon one another, he is also superimposing the function of light upon us: "that which is gaze is always a play of light and opacity."[6]

As light, this gaze does not originate from the subject, but is located outside him. Lacan refers to light as that which turns a landscape into a picture,[7] that 'photographs me', for as he states: "The gaze is the instrument through which light is embodied and through which—if you will allow me to use a word, as I often do, in a fragmented form—I am 'photo-graphed'."[8] Accordingly, the Lacanian screen developed into a surface of representation in which the gaze is trapped, preventing an unmediated encounter with the Lacanian Real — the subject's own lack. In this case, the assumption is that as part of the scopic drive, the Lacanian model of the gaze and the screen work as a media *dispositif*; articulating a complex circuit between demand, desire and visual gratification. This drive is a perpetual and constant circuit eluding *object petit a* in pursuing its metonymic representation. As a visual methodology, psychoanalysis is therefore concerned with the image and its viewer, where the viewer's own operation of the scopic drive is 'exhumed' from the image, being their own process of subjectification.

Under this premise, it is possible then to draw a parallel between media archaeology and the ways in which psychoanalysis operates in relation to the scopic drive (concerned with the visual register). Media archaeology 'excavates' the media apparata in order to reveal the discourses and practices supressed by the material/image. Furthermore, psychoanalysis excavates the unconscious in order to 'unearth' a series of hidden thoughts and repressed experiences informing the visible and conscious world. Therefore, my

5 Jussi Parikka, *What Is Media Archaeology?*

6 Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, The International Psycho-Analytical Library (London: Hogarth Press, 1977), p, 96.

7 Ibid., pp, 96.

8 Ibid., p, 106.

approach to the screenness of domesticity focuses on a process of subjectification undertaken by particular viewing conditions. The viewer gains access to the experience of inhabitation only through a hypermediated and ideological representation of it; consequently, he or she is subjectified.

It would be possible to argue that psychoanalysis works as a media archaeological survey because its transhistorical model blurs any specificity of the medium by which the agency of the subject is measured and theorised. A clear example of this is Lacan's own body of work. Although he never emphatically engaged with the optical media available at the time, he consistently used the medium of painting to discuss his theory of the Real, the Symbolic, and the Imaginary. Therefore, Lacan's discussions on anamorphism, anxiety and the insistence of the signifier, develop alongside an interesting yet complex reading of different paintings (such as Hans Holbein's *The Ambassadors*, Diego Velazquez's *Las Meninas* or Rene Magritte's *The Human Condition*), which effectively map the functioning of the scopic drive over the surface of the canvas. However, the complexities of his mappings entail a step forward onto the surface of representation in search for something inferred, but not explicitly visible, for something masked, screened under the illusion, triggered by desire. Nevertheless, the comparison can be extended if the medium of painting can be read psychoanalytically, as also can other systems of representation. Consequently, in this study, media archaeology and psychoanalysis converge into the field of architectural representation throughout the process of design research.

In analysing the media conditions of the interior, this thesis seeks to fold back media into architecture. The work, which is not exhaustive, paved the way for new and alternative modes of enquiry by other representational media. Therefore, the use of other representational techniques such as Isovist, photogrammetry or virtual reality can be implemented to expand the exploration of the media conditions of the interior, while simultaneously proposing other imaginary forms of domesticity. Offering a new approach to the study of the domestic interior, 'Screening Domesticity' re-enacts architecture through its media representation, proposing an alternative reading of it. This thesis investigated the material and subjective consequences of a screen that are no longer preoccupied with maintaining the alienating qualities of the metropolis removed from the interior, but with a screen that incorporates alienation into the very practice of its representation.

VI

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